

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: August 30, 2004, 16:58:44 ; Search time 4856 Seconds
(without alignments)
10300.219 Million cell updates/sec

Title: US-09-904-584-1
Perfect score: 1154
Sequence: 1 atggaaccccccgcacatccagat.....ccagatgactagtcgtgga 1154

Scoring table: IDENTITY_NUC
Gapop 10.0 , Gapext 1.0

Searched: 3470272 seqs, 21671516995 residues

Total number of hits satisfying chosen parameters: 6940544

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 500 summaries

Database :

GenEmbl:

- 1: gb.ba.*
- 2: gb.hcg.*
- 3: gb.in.*
- 4: gb.om.*
- 5: gb.ov.*
- 6: gb.pat.*
- 7: gb.ph.*
- 8: gb.pl.*
- 9: gb.pr.*
- 10: gb.ro.*
- 11: gb.sts.*
- 12: gb.sy.*
- 13: gb.un.*
- 14: gb.vi.*
- 15: em.ba.*
- 16: em.fun.*
- 17: em.hum.*
- 18: em.in.*
- 19: em.mu.*
- 20: em.or.*
- 21: em.ov.*
- 22: em.pat.*
- 23: em.ph.*
- 24: em.pl.*
- 25: em.to.*
- 26: em.to.*
- 27: em.un.*
- 28: em.un.*
- 29: em.vi.*
- 30: em.hcg.hum.*
- 31: em.hcg.inv.*
- 32: em.hcg.other.*
- 33: em.hcg.mus.*
- 34: em.hcg.pln.*
- 35: em.hcg.fed.*
- 36: em.hcg.mam.*
- 37: em.hcg.vrt.*
- 38: em.sy.*
- 39: em.hgo.hum.*
- 40: em.hgo.mus.*
- 41: em.hgo.other.*

Pred. No. is the number of results predicted by chance to have a

score greater than or equal to the score of the result being printed,
and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB	ID	Description
1	1154	100.0	1154	9	HSU17298	U17298 Homo sapien
2	1154	100.0	1604	9	HUMOPRK1B	L37362 Homo sapien
3	1146	99.3	1182	6	AR270854	AR270854 Sequence
4	1146	99.3	1182	6	AX548862	AX548862 Sequence
5	1146	99.3	1182	6	AX774764	AX774764 Sequence
6	1146	99.3	1182	9	HSU11053	U11053 Homo sapien
7	1143	99.0	1143	6	AR281679	AR281679 Sequence
8	1142	99.0	1142	6	A48343	A48343 Sequence 1
9	1142	99.0	1142	6	AR141371	AR141371 Sequence
10	1139.8	98.8	1143	9	AF498922	AF498922 Homo sapi
11	1137.8	98.6	1284	6	AR281680	AR281680 Sequence
12	1131.8	98.1	1143	6	AX280919	AX280919 Sequence
13	1058.4	91.7	1396	9	AY168006	AY168006 Homo sapi
14	1001	86.7	1275	6	AR281681	AR281681 Sequence
15	996.2	86.3	1275	6	AR281682	AR281682 Sequence
16	932.2	80.8	1733	10	CPU04092	U04092 Cavia porce
17	914	79.2	1273	10	RATROD	D16534 Rattus norv
18	914	79.2	1358	10	RATKOR1A	L22001 Rat kappa o
19	912.4	79.1	4742	10	RNU00442	U00442 Rattus norv
20	910.8	78.9	1288	10	S81111	S81111 kappa-opioi
21	910.8	78.9	1408	6	A68828	A68828 Sequence 5
22	910.8	78.9	1408	6	AR409589	AR409589 Sequence
23	910.8	78.9	1410	6	AR105149	AR105149 Sequence
24	910.8	78.9	1410	6	AR178399	AR178399 Sequence
25	910.8	78.9	1410	10	MUSKAFOPRE	L11065 Mouse kappa
26	910.8	78.9	2094	10	RATKOR1B	L22536 Rattus norv
27	910.8	78.9	2481	6	E08874	E08874 cDNA coding
28	910.8	78.9	2481	10	RATKOR	D16829 Rattus norv
29	871.2	75.5	1000	6	AR105156	AR105156 Sequence
30	871.2	75.5	1000	6	AR178406	AR178406 Sequence
31	833.8	54.9	757	4	PIGKOR	L49437 Sus scrofa
32	591.8	51.3	715	4	AF012105	AF012105 Sus scrof
33	546	47.3	179356	2	AC083844	AC083844 Homo sapi
34	546	47.3	183519	9	AC009646	AC009646 Homo sapi
35	510.6	44.2	1454	5	AF530573	AF530573 Rana pipi
36	488.2	42.3	1477	5	AF285173	AF285173 Dario rer
37	451	39.1	1387	5	AF132813	AF132813 Dario rer
38	448	38.6	2135	6	AR148257	AR148257 Sequence
39	448	38.6	2135	10	RATMOOR1A	L20684 Rattus norv
40	448	38.6	2397	10	RATROB	D16349 Rattus norv
41	446.4	38.7	1401	10	RATMOPIOD	L22455 Rat mu Opio
42	446.4	38.7	1448	10	RNU02083	U02083 Rattus norv
43	446.4	38.7	1586	10	RATMORA	L13069 Rattus norv
44	446.4	38.7	1618	6	AR106013	AR106013 Sequence
45	446.4	38.7	1618	6	AR106014	AR106014 Sequence
46	446.4	38.7	1618	6	AR153354	AR153354 Sequence
47	446.4	38.7	1618	6	AR153355	AR153355 Sequence
48	445.8	38.6	1231	5	CCMUOPI	Y10904 C.commerson
49	444.8	38.5	1367	10	RNU35424	U35424 Rattus norv
50	436.2	37.8	1464	9	AY036622	AY036622 Homo sapi
51	434.8	37.7	1388	9	AY036623	AY036623 Homo sapi
52	434.8	37.7	1610	6	AR106017	AR106017 Sequence
53	434.8	37.7	1610	9	HUMOP10IDA	L29301 Homo sapien
54	434.8	37.7	2160	6	AR162044	AR162044 Sequence
55	434.8	37.7	2162	6	A87781	A87781 Sequence 7
56	434.8	37.7	2162	6	AR181331	AR181331 Sequence
57	434.8	37.7	2162	6	AR182295	AR182295 Sequence
58	434.8	37.7	2162	6	AR270816	AR270816 Sequence
59	434.8	37.7	2162	6	AR301230	AR301230 Sequence
60	434.8	37.7	2162	6	AX548900	AX548900 Sequence
61	434.8	37.7	2162	9	HUMMOR1X	L25119 Human Mu op
62	433.2	37.5	1473	9	HSU12569	U12569 Rattus norv
63	432.6	37.5	1366	10	RNU00475	U00475 Rattus norv
64	432.6	37.5	1418	10	RATROA	D16348 Rattus norv
65	432.6	37.5	1438	10	AF346812	AF346812 Mus muscu

66	432.4	37.5	1332	10	AF346813	AF346813 Mus muscu	139	394.2	34.2	2205	4	SSU72758	U72758 Sus scrofa
67	432.4	37.5	1334	6	AR269386	AR269386 Sequence	140	393.4	34.1	1113	9	AY268428	AY268428 Homo sapi
68	432.4	37.5	1334	10	AF074973	AF074973 Mus muscu	141	393.4	34.1	1379	9	AF348323	AF348323 Homo sapi
69	432.4	37.5	1346	10	AF167566	AF167566 Mus muscu	142	393.4	34.1	1805	6	AX746239	AX746239 Sequence
70	432.4	37.5	1365	6	AR269394	AR269394 Sequence	143	393.4	34.1	1973	6	AR370828	AR370828 Sequence
71	432.4	37.5	1365	10	AF167565	AF167565 Mus muscu	144	393.4	34.1	1973	6	AR380872	AR380872 Sequence
72	432.4	37.5	1373	10	AY160190	AY160190 Mus muscu	145	393.4	34.1	1973	9	HSORL1	X77130 H. sapiens m
73	432.4	37.5	1423	6	AR269384	AR269384 Sequence	146	393.4	34.1	2534	6	AX548923	AX548923 Sequence
74	432.4	37.5	1423	10	AF062753	AF062753 Mus muscu	147	393.4	34.1	2534	9	HSU0185	U30185 Human orpha
75	432.4	37.5	1440	10	AF260306	AF260306 Mus muscu	148	393.4	34.1	3420	9	BC038433	BC038433 Homo sapi
76	432.4	37.5	1440	10	AF400246	AF400246 Mus muscu	149	393.4	34.1	1113	6	AX280917	AX280917 Sequence
77	432.4	37.5	1500	10	AF346814	AF346814 Mus muscu	150	387.6	33.6	1082	6	AF260311	AF260311 Mus muscu
78	432.4	37.5	1543	10	AF074974	AF074974 Mus muscu	151	387.6	33.6	1238	6	AR269385	AR269385 Sequence
79	432.4	37.5	1569	10	AF260308	AF260308 Mus muscu	152	387.6	33.6	1239	10	AF062755	AF062755 Mus muscu
80	432.4	37.5	1569	10	AF400248	AF400248 Mus muscu	153	387.6	33.6	1257	6	AR269388	AR269388 Sequence
81	432.4	37.5	1610	6	AR269399	AR269399 Sequence	154	387.6	33.6	1258	10	AF074972	AF074972 Mus muscu
82	432.4	37.5	1610	10	MMU26915	U26915 Mus musculus	155	387.6	33.6	1258	10	AF074972	AF074972 Mus muscu
83	432.4	37.5	1614	10	AF260307	AF260307 Mus muscu	156	385.8	33.4	1174	10	AF260309	AF260309 Mus muscu
84	432.4	37.5	1614	10	AF400247	AF400247 Mus muscu	157	385.8	33.4	1133	10	AF260310	AF260310 Mus muscu
85	432.4	37.5	1695	10	AY036621	AY036621 Mus muscu	158	384.6	33.3	1064	9	AX195733	AX195733 Homo sapi
86	432.4	37.5	1729	6	AR269392	AR269392 Sequence	159	383.2	33.2	1252	5	AF530572	AF530572 Homo sapi
87	432.4	37.5	1729	10	AF167568	AF167568 Mus muscu	160	377.6	32.7	1104	9	HUMOPRLP	AF530572 Rana pipi
88	432.4	37.5	2045	10	AR269393	AR269393 Sequence	161	377.6	32.7	1253	10	RATOPRE	AF530572 Rana pipi
89	432.4	37.5	2045	10	AF167567	AF167567 Mus muscu	162	377.6	32.7	1253	10	RATOPRE	AF530572 Rana pipi
90	432.4	37.5	2137	10	AB047546	AB047546 Mus muscu	163	377.6	32.7	1567	6	AR106024	AR106024 Sequence
91	431.6	37.4	1182	6	AX280923	AX280923 Sequence	164	377.6	32.7	1567	6	RATOPRECEP	AR106024 Sequence
92	431.6	37.4	1203	6	AX280921	AX280921 Sequence	165	377.6	32.7	1817	10	RATOPRECEP	AR106024 Sequence
93	431.6	37.4	1399	9	AY038989	AY038989 Macaca fa	166	377.6	32.7	2354	10	RATOPRECEP	AR106024 Sequence
94	430.8	37.3	2229	6	AR269393	AR269393 Sequence	167	377.6	32.7	2706	6	AR031258	AR031258 Sequence
95	430.8	37.3	2229	6	AR269393	AR269393 Sequence	168	377.6	32.7	2706	6	AR031258	AR031258 Sequence
96	430.8	37.3	2229	6	AR269393	AR269393 Sequence	169	377.6	32.7	2706	6	AR031258	AR031258 Sequence
97	430.6	37.3	1186	10	SW786883	SW786883 Sequence	170	376	32.6	1421	5	AF530571	AF530571 Rana pipi
98	430.6	37.3	68339	2	AC103663_3	Continuation (4 of	171	376	32.6	1304	10	RNU05239	RNU05239 Rattus norv
99	430.6	37.3	110000	2	AC103663_2	Continuation (3 of	172	369.8	32.0	2858	10	CPU04369	CPU04369 Rattus norv
100	430.6	37.3	110000	2	AC134788_0	Continuation (3 of	173	369.4	32.0	2894	10	BC051982	BC051982 Mus muscu
101	430.6	37.3	263462	2	AC124029	AC124029 Mus muscu	174	368	31.9	1452	6	AR048198	AR048198 Sequence
102	430.4	37.3	432	9	HUMKOR	L36130 Homo sapien	175	368	31.9	1452	6	AR048198	AR048198 Sequence
103	430	37.3	1203	9	AF286024	AF286024 Macaca mu	176	368	31.9	1452	6	AR048198	AR048198 Sequence
104	430	37.3	1881	4	PIGMOPTR	L38645 Sus scrofa	177	368	31.9	1452	6	AR048198	AR048198 Sequence
105	429.2	37.2	1542	6	AR269387	AR269387 Sequence	178	368	31.9	1452	6	AR048198	AR048198 Sequence
106	429.2	37.2	1981	6	AR269387	AR269387 Sequence	179	368	31.9	1452	6	AR048198	AR048198 Sequence
107	427.6	37.1	1710	10	AY166606	AY166606 Cavia por	180	367.8	31.9	1079	10	MMU4155	MMU4155 Mus musculu
108	425.8	36.9	4048	10	RNKOR3	U17995 Rattus norv	181	367.8	31.9	1134	9	AF404125	AF404125 Sequence
109	425.8	36.9	257246	2	AC094764	AC094764 Rattus norv	182	367.8	31.9	1134	9	AF126470	AF126470 Homo sapi
110	425.8	36.9	315342	2	AC112396	AC112396 Rattus norv	183	367.8	31.9	1330	6	AR105151	AR105151 Sequence
111	425.6	36.9	638	10	D3166383	D31665 Mus musculu	184	367.8	31.9	1330	6	AR178401	AR178401 Sequence
112	425.2	36.8	1881	4	AF521309	AF521309 Sus scrof	185	367.8	31.9	1338	10	MMU04952	MMU04952 Mus musculu
113	424	36.7	1415	4	BTU89677	BTU89677 Bos tauru	186	367.8	31.9	2024	10	MMU04952	MMU04952 Mus musculu
114	422.6	36.6	1829	6	AR086615	AR086615 Sequence	187	367.8	31.9	2600	6	AR437561	AR437561 Sequence
115	422.6	36.6	1829	6	AR086615	AR086615 Sequence	188	367.8	31.9	2934	10	BC050885	BC050885 Mus muscu
116	422.6	36.6	1834	10	AF46228	AF46228 Sequence	189	366.2	31.7	2600	6	AX418278	AX418278 Sequence
117	422.6	36.6	1835	10	MUSDPORCP	S65335 Mus sp. del	190	366.2	31.7	2600	6	AX418278	AX418278 Sequence
118	422.6	36.6	2203	10	S66181	L07271 Mouse delta	191	357	30.9	1177	6	AR404124	AR404124 Sequence
119	422.6	36.6	2218	6	AR68896	S66181 delta opiat	192	357	30.9	1177	9	AF115266	AF115266 Homo sapi
120	422.6	36.6	2218	6	AR68896	AR68896 Sequence	193	354.2	30.7	455	9	HUMOPRKL	L26073 Homo sapien
121	422.6	36.6	2219	6	AR38528	AR38528 Sequence	194	344.8	29.9	2600	6	AR004660	AR004660 Sequence
122	422.6	36.6	2219	6	AR38528	AR38528 Sequence	195	343.8	29.8	720	10	S77863	S77863 mu-opioid r
123	422.6	36.6	2219	6	AR38528	AR38528 Sequence	196	338.8	29.4	24224	2	AC105888	AC105888 Rattus no
124	422.6	36.6	2272	6	MUSDELTO	L06322 Mus musculu	197	337.4	29.2	1144	10	AF126469	AF126469 Mus muscu
125	422.6	36.6	2272	6	AR105150	AR105150 Sequence	198	336.2	29.1	1223	6	AR404122	AR404122 Sequence
126	422.6	36.6	2272	6	AR178400	AR178400 Sequence	199	336.2	29.1	1283	6	AR404123	AR404123 Sequence
127	414	35.9	64745	2	MUSDELOPE	L11064 Mouse delta	200	336.2	29.1	1283	6	AF115267	AF115267 Rattus no
128	411.8	35.7	1773	9	HSU07882	U07882 Homo sapi	201	334.6	29.0	686	4	SSU71149	SSU71149 Sus scrofa
129	411	35.6	1346	6	AR269395	U07882 Human delta	202	327.4	28.4	2634	6	AR404119	AR404119 Sequence
130	410.2	35.5	1136	9	HSU10504	U10504 Human delta	203	327.4	28.4	2634	6	AR404119	AR404119 Sequence
131	409.4	35.5	1141	5	AY434690	AY434690 Rana pipi	204	327	28.3	1256	6	AF043276	AF043276 Mus muscu
132	408.6	35.4	1773	6	AR270842	AR270842 Sequence	205	327	28.3	1257	10	AF043277	AF043277 Mus muscu
133	408.6	35.4	1773	6	AX548822	AX548822 Sequence	206	327	28.3	1257	10	AF043277	AF043277 Mus muscu
134	407	35.3	1119	6	AX280915	AX280915 Sequence	207	319.6	27.7	830	6	AX746234	AX746234 Sequence
135	403.8	35.0	2587	5	AY148348	AY148348 Danio rer	208	304.6	26.4	488	10	D3166382	D31664 Mus musculu
136	399	34.6	998	6	AR38530	AR38530 Sequence	209	304.6	26.4	658	10	RNKOR2	U17994 Rattus norv
137	399	34.6	998	6	AR316836	AR316836 Sequence	210	304.6	26.4	1109	10	S778682	S77869 kappa opioi
138	396	34.3	1458	5	DRU1596	DRU1596 Danio rer	211	302.6	26.2	230734	2	AC133705	AC133705 Rattus no

212	298.8	25.9	432	10	MMU16998	U16998 Mus musculus	285	214.8	18.6	1351	9	HUMSRI2A	M81830 Human somat
213	298.4	25.9	1241	10	AF075605	AF075605 Mus muscu	286	214.8	18.6	1510	6	AX646485	AX646485 Sequence
214	298.4	25.9	1244	10	AF062381	AF062381 Mus muscu	287	214.8	18.6	1510	9	AB065911	AB065911 Homo sapi
215	298.4	23.8	351	11	BV094394	BV094394 RPAMSEQO	288	214.8	18.6	1769	9	BC019610	BC019610 Homo sapi
216	274.4	23.8	345	11	BV094393	BV094393 RPAMSEQO	289	214.8	18.6	2570	9	EC009522	EC009522 Homo sapi
217	274	23.7	341	11	BV094399	BV094399 RPAMSEQO	290	214.8	18.6	3437	9	AF184174	AF184174 Homo sapi
218	268.8	23.3	8372	10	AF216218	AF216218 Rattus no	291	214.8	18.6	164766	2	AC018350	AC018350 Homo sapi
219	268.8	22.5	106777	2	AC136241	AC136241 Rattus no	292	214.8	18.6	167127	9	AC097641	AC097641 Homo sapi
220	259.4	22.5	194770	10	AL845173	AL845173 Mouse DNA	C 293	214	18.5	1845	5	AF139597	AF139597 Carassius
221	258.6	22.4	1083	10	D31666S2	D31667 Mus musculus	294	213.8	18.5	140008	10	AL935149	AL935149 Mouse DNA
222	257.4	22.3	1843	6	AX647137	AX647137 Sequence	295	213.6	18.5	215863	2	AC136812	AC136812 Rattus no
223	250.8	21.7	179888	9	HS1022E24	AL121581 Human DNA	C 296	213.6	18.5	252700	2	AC136575	AC136575 Rattus no
224	249.2	21.6	194498	5	AF329945	AF329945 Taxifugu	297	212.6	18.4	1461	10	RATSR	M97656 Rattus norv
225	243	21.1	13999	9	HUMSRR4Z	LO7061 Human somat	298	211.6	18.3	1110	6	AX280947	AX280947 Sequence
226	243	21.1	2447	6	AX746233	AX746233 Sequence	C 299	211.6	18.3	222981	10	AL669981	AL669981 Mouse DNA
227	243	21.1	97912	9	HS753D10	AL049651 Human DNA	300	211.2	18.3	441	4	ECAS19535	AJ519535 Equus cab
228	243	21.1	153187	2	ACO11151	ACO11151 Homo sapi	301	210.4	18.2	999	6	BD102712	BD102712 Ligand fo
229	242.6	21.0	1317	6	AP270883	AP270883 Sequence	302	210.4	18.2	999	6	BD182462	BD182462 Screening
230	242.6	21.0	1317	9	HUMSRR4	D16826 Homo sapien	303	210.4	18.2	1002	6	AR308566	AR308566 Sequence
231	242.6	21.0	1427	6	AX335932	AX335932 Sequence	304	210.4	18.2	1002	6	AX548993	AX548993 Sequence
232	242.6	21.0	1427	9	HUMSONAT	L14856 Human somat	305	210.4	18.2	1002	6	AX923099	AX923099 Sequence
233	241	20.9	1167	6	AX549032	AX549032 Sequence	306	210.4	18.2	1518	6	I33192	I33192 Sequence 3
234	241	20.9	1340	9	HUMSONATA	LO7833 Homo sapien	307	210.4	18.2	1518	6	AR270917	AR270917 Sequence
235	239.4	20.7	1167	6	AX280951	AX280951 Sequence	308	210.4	18.2	1518	6	HSU22492	U22492 Human G pro
236	234.6	20.3	192592	5	AL929096	AL929096 Zebrafish	309	208.2	18.0	946	4	AF148990	AF148990 Sus scrof
237	232.4	20.1	1107	4	BOVSOREC	LO6613 Bos taurus	310	208	18.0	1898	10	MMU26176	U26176 Mus musculu
238	230.2	19.9	1400	4	OAR314853	AJ314853 Ovis arie	311	207.2	18.0	1002	6	AR308688	AR308688 Sequence
239	229.6	19.9	1176	6	AX549026	AX549026 Sequence	312	205.6	17.8	1587	5	AF097727	AF097727 Carassius
240	229.6	19.9	1176	9	AX322536	AX322536 Homo sapi	313	205.4	17.8	1598	9	HSOPRMI2	AF024516 Homo sapi
241	229.6	19.9	1205	6	I98864	I98864 Sequence 13	C 314	205.4	17.8	96310	9	AL136444	AL136444 Human DNA
242	229.6	19.9	1634	6	I13402	I13402 Sequence 1	315	204.8	17.7	240	4	AY130756	AY130756 Sus scrof
243	229.6	19.9	1634	6	I98858	I98858 Sequence 1	316	203.6	17.6	371	10	MMOR2	U10559 Mus musculu
244	229.6	19.9	1634	6	AR270739	AR270739 Sequence	317	203.6	17.6	12467	10	MMU308511	AJ308511 Mus muscu
245	229.6	19.9	1634	9	HUMSRI1A	M81829 Human somat	C 318	203.6	17.6	12784	10	AF347691	AF347691 Mus muscu
246	229.6	19.9	4000	9	BC035618	BC035618 Homo sapi	319	203.6	17.6	177639	2	AC101942	AC101942 Mus muscu
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248	228.6	19.8	3615	10	RNGPCRRA	X62314 R.norvegicu	C 321	203.6	17.6	182048	2	AC027439	AC027439 Homo sapi
249	228.6	19.8	236764	2	AC119319	AC119319 Rattus no	322	200.8	17.4	539	4	MMOR3	U10560 Mus musculu
250	228.6	19.8	258401	6	AC098459	AC098459 Rattus no	323	200.6	17.4	750	4	AY305400	AY305400 Canis fam
251	226.6	19.6	1265	6	I13403	I13403 Sequence 3	324	199.2	17.3	1492	5	AF097726	AF097726 Carassius
252	226.6	19.6	1265	6	I98859	I98859 Sequence 3	C 325	199.2	17.3	148540	9	HS212P9	AL009181 Human DNA
253	226.6	19.6	1265	10	MUSSRI1A	M81831 Mus musculu	C 326	199.2	17.3	167335	2	AC023527	AC023527 Homo sapi
254	226.6	19.6	163312	10	AC123932	AC123932 Mus muscu	327	196	17.0	417	5	AF285174	AF285174 Danio rer
255	226.4	19.6	1176	6	AX280945	AX280945 Sequence	328	194.6	16.9	355	4	AY116499	AY116499 Sus scrof
256	224.4	19.4	1493	10	MWSSRR2G	X59665 M.musculus	329	190.2	16.5	1757	10	RNKOR1	U17993 Rattus norv
257	224	19.4	1286	4	PTGSSR	D21338 P.g DNA for	330	189.4	16.4	555	10	MMKOR3S08	U32932 Mus musculu
258	222.8	19.3	4730	10	AF008914	AF008914 Mus muscu	331	186.4	16.2	1008	6	BD187235	BD187235 Novel lig
259	222.8	19.3	142178	10	AL603705	AL603705 Mouse DNA	332	186.4	16.2	1011	4	AB085947	AB085947 Bos tauru
260	221.8	19.2	1904	6	AX305329	AX305329 Sequence	333	184	15.9	1560	10	RATSSSTR	M96544 Rattus norv
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262	221.2	19.2	1244	6	I13405	I13405 Sequence 7	335	184	15.9	254708	2	AC111761	AC111761 Rattus no
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265	220.8	19.1	2092	10	RATSONRA	M93273 Rat somatos	338	182.2	15.8	423	10	D31663S1	D31663 Mus musculu
266	220.8	19.1	2116	10	RATSONRRC	M96817 Rat somatos	339	182.2	15.8	2074	10	S77868S1	S77868 kappa opioi
267	220.8	19.1	245218	2	AC096468	AC096468 Rattus no	340	181.4	15.7	760	4	AY156053	AY156053 Sus scrof
268	220.6	19.1	1699	10	RATSON	LO2915 Rattus norv	341	178.8	15.5	1000	6	BD169687	BD169687 Novel G p
269	219.4	19.0	2518	6	AR404121	AR404121 Sequence	342	178.8	15.5	1000	6	BD179429	BD179429 Screening
270	219	19.0	1229	9	HSU16860	U16860 Human kappa	343	178.8	15.5	1000	6	BD182529	BD182529 Screening
271	219	19.0	234999	2	AC117147	AC117147 Rattus no	344	178.8	15.5	1000	6	BD187208	BD187208 Novel lig
272	215.2	18.6	1023	6	BD102694	BD102694 Ligand fo	345	178.8	15.5	167249	9	AC009800	AC009800 Homo sapi
273	215.2	18.6	1023	6	BD169577	BD169577 Novel G p	346	178.8	15.5	173380	9	AC087348	AC087348 Homo sapi
274	215.2	18.6	1023	6	BD182444	BD182444 Screening	347	177	15.3	987	6	BD169569	BD169569 Novel G p
275	215.2	18.6	1023	6	BD187233	BD187233 Novel lig	348	177	15.3	987	6	BD187217	BD187217 Novel lig
276	215.2	18.6	179888	9	HS1022E24	AL121581 Human DNA	349	177	15.3	262089	2	AC128209	AC128209 Rattus no
277	214.8	18.6	1107	6	E11322	E11322 Human cDNA	350	177	15.3	311157	2	AC131359	AC131359 Rattus no
278	214.8	18.6	1110	6	AX549028	AX549028 Sequence	351	176.8	15.3	993	6	BD187234	BD187234 Novel lig
279	214.8	18.6	1110	9	AX236542	AX236542 Homo sapi	352	176.8	15.3	996	4	AB085946	AB085946 Bos tauru
280	214.8	18.6	1147	6	I98865	I98865 Sequence 15	353	176.6	15.3	903	4	AY156052	AY156052 Sus scrof
281	214.8	18.6	1351	6	I13404	I13404 Sequence 5	354	175.6	15.2	987	6	AR308563	AR308563 Sequence
282	214.8	18.6	1351	6	I98860	I98860 Sequence 5	355	175.6	15.2	987	6	AX548991	AX548991 Sequence
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358	175.6	15.2	1596	6	AR270916	Sequence	431	132.2	11.5	2004	3	LS27270459	AR270459	Lymanaea s
359	175.6	15.2	1596	9	HSU22491	Human G pro	432	131.2	11.4	672	6	E13006	E13006	cDNA encodi
C 360	175.4	15.2	169376	5	BL537357	Danio rer	C 433	130.4	11.3	349	11	BV094396	BV094396	RPAMSEQO
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369	170.2	14.7	987	6	BD169665	Novel G p	C 442	129.6	11.2	687	6	BD182445	BD182445	Screening
370	170.2	14.7	1083	6	BD169664	Novel G p	C 443	126.8	11.0	426	11	G67505	G67505	SSTR X4.1 H
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373	169.4	14.7	33002	9	HS349511	Human DNA	446	126	10.9	172871	10	AL607131	AL607131	Mouse DNA
374	169.4	14.7	162342	9	AC009041	Homo sapi	447	125.8	10.9	555	11	G67497	G67497	SSTR X1.2 H
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C 383	166.4	14.4	265670	2	AC121696	Rattus no	456	123.4	10.7	1211	9	AF080586	AF080586	Homo sapi
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C 387	163.8	14.2	181202	2	AC008048	Homo sapi	460	123.4	10.7	1365	6	AF042362	AF042362	Cercopith
388	162.2	14.1	1257	6	AX549030	Sequence	461	123	10.7	606	9	AF042362	AF042362	Cercopith
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C 397	162.2	14.1	128942	2	HS1513B14	Sequence	470	121.2	10.5	1080	6	AR096460	AR096460	Sequence
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399	161.4	14.0	2154	10	AF035777	Mus muscu	472	120.8	10.5	1164	6	AX280881	AX280881	Sequence
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401	160.6	13.9	1257	6	AX280949	Sequence	474	120.6	10.5	1116	6	AX720821	AX720821	Sequence
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405	156.2	13.5	1796	6	IL3407	Sequence 11	478	119	10.3	1495	6	AR270627	AR270627	Rat angiot
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408	156.2	13.5	166677	10	AL530144	Mouse somat	481	119	10.3	1516	6	AX646471	AX646471	Sequence
409	155.6	13.5	356	10	MMKOR3306	Sequence	482	119	10.3	1516	6	AB065871	AB065871	Homo sapi
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411	153.2	13.3	1115	10	MMU32697	Rattus norv	484	119	10.3	1900	6	AX548949	AX548949	Sequence
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418	145.4	12.6	2364	3	AY029170	Drosophila	491	119	10.3	2156	9	HUMRANTES	HUMRANTES	Homo sapien
419	144.6	12.5	3985	10	RNGPROCR	R. norvegicu	492	119	10.3	2214	9	HUMEM145	HUMEM145	Sequence
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421	141.8	12.3	1842	3	LST270462	Lymanaea s	C 494	119	10.3	177334	9	AC138069	AC138069	Homo sapi
422	140.2	12.1	1725	3	LST270460	Lymanaea s	C 495	119	10.3	197279	9	AC104439	AC104439	Homo sapi
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* RESULT 1
HSU17298      1154 bp  mRNA  linear  PRI 14-JUL-1995
LOCUS         Human kappa opioid receptor (hKOR) mRNA, complete cds.
DEFINITION
ACCESSION    U17298
VERSION      U17298.1 GI:596069
KEYWORDS
SOURCE       Homo sapiens (human)
ORGANISM     Homo sapiens
Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE    1 (bases 1 to 1154)
AUTHORS      Simonin,F., Gaveriaux-Ruff,C., Befort,K., Matthes,H., Lannes,B.,
              Michelletti,G., Mattei,M.G., Charron,G., Bloch,B. and Kieffer,B.,
              kappa-Opioid receptor in humans: cDNA and genomic cloning,
              chromosomal assignment, functional expression, pharmacology, and
              expression pattern in the central nervous system
              Proc. Natl. Acad. Sci. U.S.A. 92 (15), 7006-7010 (1995)
JOURNAL      95350200
MEDLINE      7624359
PUBMED
REFERENCE    2 (bases 1 to 1154)
AUTHORS      Mansson,E., Bare,L. and Yang,D.
              Isolation of a human kappa opioid receptor cDNA from placenta
              Biochem. Biophys. Res. Commun. 202 (3), 1431-1437 (1994)
JOURNAL      94338360
MEDLINE
PUBMED      8060324
REFERENCE    3 (bases 1 to 1154)
AUTHORS      Kieffer,B.
              Direct Submission
              Submitted (18-NOV-1994) Brigitte Kieffer, Ecole Supérieure De
              Biotechnologie De Strasbourg, Boulevard Sebastien Brandt, Illkirch,
              67400, France
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                CHPVKALDFRPLKAKINICTWLLSSVGIISAVILGQTKVREDVDVIEQSLPPDDDD
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ORIGIN
Query Match      100.0%; Score 1154; DB 9; Length 1154;
Best Local Similarity 100.0%; Pred. No. 2e-202;
Matches 1154; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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RESULT 2

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DB 1021 TTCCGGGACTTCTGCTTTTCCACTGGAAGATGAGGATGAGCGGCGAGAGCTAGCAGAGTC 1080
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QY 1141 TGACTAGTCTGTGA 1154
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HUMOPRK1B 1604 bp mRNA linear PRI 22-MAR-1995
 LOCUS Homo sapiens (clone d2-115) kappa opioid receptor (OPRK1) mRNA,
 DEFINITION complete cds.
 ACCESSION L37362
 VERSION L37362.1 GI:722617
 KEYWORDS OPRK1 gene; kappa opioid receptor; opioid receptor.
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Homnidae; Homo.
 REFERENCE 1 (bases 1 to 1604)
 AUTHORS Zhu, J., Chen, C., Xue, J.-C., Kunapuli, S., Deriel, J.K. and
 Liu-Chen, L.-Y.
 TITLE Cloning of a human kappa opioid receptor from the brain
 JOURNAL Life Sci. 56, 201-207 (1995)
 COMMENT Original source text: Homo sapiens (clone d2-115) (tissue library:
 genomic in lambda dash and cDNA in lambda ZAPII) fetus brain cDNA
 to mRNA.

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ORIGIN
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 Best Local Similarity 100.0%; Pred. No. 2e-202;
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 121 AGCGCGGCTCGGAGGAGCGCGAGCTGGAGCGCGCGACATCTCCCGGCCATCCCGGTC 180
 498 AGCGCGGCTCGGAGGAGCGCGAGCTGGAGCGCGCGACATCTCCCGGCCATCCCGGTC 557
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 241 ATGTTCTGTGATCATCCGATACACAAAGATGAAGACAGCAACCAACATTTACATTTAAC 300
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 301 CTGGCTTTGGCAGAGCTTTAGTTACTACAAACGATGCCCTTTCAGATACGGTCTACTTG 360

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 Qy 361 ATGAATTTCTGCGCTTTTGGGATGTGCTGTGCAAGATAGTAATTTCAATTGATTACTAC 420
 Db 738 ATGAATTTCTGCGCTTTTGGGATGTGCTGTGCAAGATAGTAATTTCAATTGATTACTAC 797
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 Db 798 AACATGTTTACCAGCATCTTACCTTTGACCATGATGAGCGTGAGCGGTACATATGCCGTG 857
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 Db 858 TGCCACCCCGTGAAGGCTTTGGACTTCGCGACACCCCTTGAAGGCAAGATCATCAATATC 917
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 Qy 601 GTCAGGGAAGACGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 660
 Db 978 GTCAGGGAAGACGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1037
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 Qy 781 GGCTCCCGAGAGAAAGATCGCAACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 840
 Db 1158 GGCTCCCGAGAGAAAGATCGCAACCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1217
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 Db 1218 GCAGTCTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1277
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 Qy 1081 CGAAATACAGTTACAGATCTGCTTACCTGAGGACATCGATGGGATGAATAAACCCAGTA 1140
 Db 1458 CGAAATACAGTTACAGATCTGCTTACCTGAGGACATCGATGGGATGAATAAACCCAGTA 1517
 Qy 1141 TGACTAGTCTGGA 1154
 Db 1518 TGACTAGTCTGGA 1531

RESULT 3
 AR270854
 LOCUS Sequence 1417 from patent US 650938.
 DEFINITION AR270854
 ACCESSION AR270854
 VERSION AR270854.1 GI:29702088
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unclassified.
 REFERENCE 1 (bases 1 to 1182)
 AUTHORS Au-Young, J. and Seilhamer, J. J.
 TITLE Composition for the detection of signaling pathway gene expression

JOURNAL Patent: US 6500938-A 1417 31-DEC-2002;
FEATURES Location/Qualifiers
source 1..1182
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ORIGIN

Query Match 99.3%; Score 1146; DB 6; Length 1182;
Best Local Similarity 99.6%; Pred. No. 6e-201;
Matches 1149; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Db 914 AGCACTCCACAGCAGCTGCTCTCTCCAGCTATTACTTCTGCTATGCGCTTAGGCTAT 973
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Qy 1081 CGAAATACAGTTCAGGATCTGTTTACCTGAGGACATCGATGGATGAATAAACAGTA 1140
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Qy 1141 TGACTAGTCGTGA 1154
Db 1154 TGACTAGTCGTGA 1167

RESULT 4
AX548862 LOCUS 1182 bp DNA linear PAT 26-NOV-2002
DEFINITION Sequence 147 from Patent WO2061087.
ACCESSION AX548862
VERSION AX548862.1 GI:25813740
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

REFERENCE 1
AUTHORS Burmer, G.C., Roush, G.L. and Brown, J.P.
TITLE Antigenic peptides, such as for G protein-coupled receptors (GPCRs), antibodies thereto, and systems for identifying such antigenic peptides
JOURNAL Patent: WO 02061087-A 147 08-AUG-2002;
Lifespan Biosciences, Inc. (US)
FEATURES Location/Qualifiers
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ORIGIN

Query Match 99.3%; Score 1146; DB 6; Length 1182;
Best Local Similarity 99.6%; Pred. No. 6e-201;
Matches 1149; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

Qy 1 ATGGAATCCCCGATCCAGATCTTCCGCGGGAGCCGCGCTACCTGCGCCGAGCGCC 60
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Db 74 TGCTGCGCCCGCCACAGCAGCGCTGTTTCCGCGCTGGCGGAGCCGAGCAACGCGC 133
Qy 121 AGCGCGGCTCGGAGGACGCGAGCTGGAGCCCGGACATCTCCCGGCGCATCCCGGTC 180
Db 134 AGCGCGGCTCGGAGGACGCGAGCTGGAGCCCGGACATCTCCCGGCGCATCCCGGTC 193
Qy 181 ATCATACGCGGCTCTACTCCGTAGTGTTCGTGGGCTTGGTGGCACTCGCTGGTC 240
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601	Qy	GTCAAGGAAGCGTCGATGTCAATTGAGTGTCTCTTGCACTCCAGANGATGACTACTCC	660
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901	Qy	AGCACTCCCAAGCAGCAGTGTCTCTCAGCTATTACTCTTCGATCGGCTTAGGCTAT	960
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1081	Qy	CGAATACAGTTTCAAGATCCTGCTTACCTCAGGGAATCGATGGGATGAATAAACAGTA	1140
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RESULT 5
AX774764
LOCUS
DEFINITION
SEQUENCE 80 from Patent WO03038129.
ACCESSION
VERSION
GI:32486280
KEYWORDS
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SOURCE
ORGANISM
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Eukaryota; Metazoa; Chordata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
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REFERENCE
Raponi,M.
AUTHORS
Methods for assessing and treating leukemia
TITLE
Patent: WO 03038129-A 80 08-MAY-2003;
JOURNAL
Ortho-Clinical Diagnostics, Inc. (US)
Location/Qualifiers

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Best Local Similarity 99.6%;   Pred. No. 6e-201;
Matches 1149; Conservative 0; Mismatches 5; Indels 0; Gaps 0;

QY      1  ATGGACTCCCGCATCCAGATCTTCGCGGGGAGCGGGCCCTACTCTGCGCCCGAGCGGC 60
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QY      61  TGCCTGCCCGCCAAACAGCAGCGCCCTGGTTTCCGGCTGGGCGGAGCCGAGCAGCAACGGC 120
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QY      121  AGCGCGCGTCCGAGGACGCGCAGCTGGAGCCCGCGGCACATCTCCCGGCCCATCCCGGTC 180
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DB      314  CTGGGCTTTGGCAGATGCTTTAGTTACTACACCATGCCCTTTTCAGAGTACGGTCTACTTG 373
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DB      614  GTCAGGGAAGACGTCCGATGTCAATTGAGTGCTCCTTGCAGTTCCTCCAGATGATGACTACC 673
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DB      734  ATCATCATGCTGTGTACACCTGATGATCTGGCTCTCAAGAGCGTCCGGCTCCTTTCT 793
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DB      854  CGGTTTTCGCTGCTGTGGACTCCCATTCACATATTTCATCTCTGGTGGAGGCTCTGGGG 913
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 Db 1154 TGACTAGTCGTGGA 1167

*

RESULT 6
 LOCUS HSU11053 1182 bp mRNA linear PRI 22-AUG-1994
 DEFINITION Human kappa opioid receptor (hKOR) mRNA, complete cds.
 ACCESSION U11053
 VERSION U11053.1 GI:532059
 KEYWORDS
 SOURCE Homo sapiens (human)
 ORGANISM Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 1 (bases 1 to 1182)
 TITLE Isolation of a human kappa opioid receptor cDNA from placenta
 JOURNAL Biochem. Biophys. Res. Commun. 202 (3), 1431-1437 (1994)
 MEDLINE 94338360
 PUBMED 8060324
 REFERENCE 2 (bases 1 to 1182)
 AUTHORS Mansson,E.
 TITLE Direct Submission
 JOURNAL Submitted (20-JUN-1994) Erik Mansson, Molecular Biology, Ohmeda,
 PPD, 100 Mountain Avenue, Murray Hill, NJ 07974, USA
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FEATURES

source
 gene
 CDS

ORIGIN

Query Match 99.3%; Score 1146; DB 9; Length 1182;
 Best Local Similarity 99.6%; Pred. No. 66-201;
 Matches 1149; Conservative 0; Mismatches 5; Indels 0; Gaps 0;
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 QY 61 TGCCTGCCCCCAACAGCAGCGCTTGGTTTCCCGGCTGGGCGGAGCGCCGACGACGACGCGC 120

Db 74 TGCCTGCCCCCAACAGCAGCGCTTGGTTTCCCGGCTGGGCGGAGCCCCGACGACAAACGCG 133
 QY 121 AGCGCGGGCTCGGAGGACCGCGAGCTGGAGCGCGCGCACATCTCCCGCGCCATCCCGGTC 180
 Db 134 AGCGCGGGCTCGGAGGACCGCGAGCTGGAGCGCGCGCACATCTCCCGCGCCATCCCGGTC 193
 QY 181 ATCATCAGCGGGCTCTACTCCGCTAGTGTTCGTCGTGGGCTTGGTGGGCACTCGCTGGTC 240
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 Db 614 GTACGGGAAGACGTGATGTCATGATGCTCTCTGAGTTCCTGAGTTCAGATGATGATCTCC 673
 QY 661 TGGTGGGACCTCTTTATGAAGATCTGCGTCTTCATCTTTGCTTCGTGATCCCTGTCCTC 720
 Db 674 TGGTGGGACCTCTTTATGAAGATCTGCGTCTTCATCTTTGCTTCGTGATCCCTGTCCTC 733
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 Db 734 ATCATCATCGTCTGCTACACCTGATGATCCTCGGCTCTCAAGAGCGTCCGGCTCTTTCT 793
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 Db 794 GGCTCCCGAGAGAAAGATCGCAACCTGCGTAGGATCACCAGACTGGTCTGCTGCTGGTG 853
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 Db 914 AGCACTCCACAGCAGCTGCTCTCCAGCTATTAATCTTCTGCACTCGGCTTAGGCTAT 973
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Db 1154 TGAAGTACGCTGGA 1167

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LOCUS AR281679 1143 bp DNA linear PAT 10-APR-2003
DEFINITION Sequence 1 from patent US 6518480.
ACCESSION AR281679
VERSION AR281679.1 GI:29717434
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE Unclassified.
AUTHORS 1 (bases 1 to 1143)
TITLE Conklin, B.R.
SELECTIVE target cell activation by expression of a G
protein-coupled receptor activated superiorly by synthetic ligand
JOURNAL Patent: US 6518480-A 1 11-FEB-2003;
FEATURES Location/Qualifiers
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Best Local Similarity 100.0%; Pred. No. 2.2e-200; Mismatches 0; Indels 0; Gaps 0;
Matches 1143; Conservative 0;

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QY 1141 TGA 1143
DB 1141 TGA 1143

RESULT 8
LOCUS A48343 1142 bp DNA linear PAT 07-MAR-1997
DEFINITION Sequence 1 from Patent WO9601898.
ACCESSION A48343
VERSION A48343.1 GI:2302133
KEYWORDS
SOURCE unidentified
ORGANISM unidentified
REFERENCE 1 (bases 1 to 1142)
AUTHORS Kieffer, B. and Simonin, F.
TITLE HUMAN KAPPA OPIOID RECEPTOR, NUCLEIC ACIDS AND USES THEREOF
JOURNAL Patent: WO 9601898-A 1 25-JAN-1996;
UNIV PASTEUR (FR)
COMMENT Other publication PR 2722209 960112.
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CDS
ORIGIN

Query Match 99.0%; Score 1142; DB 6; Length 1142;

Best Local Similarity 100.0%; Pred. No. 3.3e-200; Mismatches 0; Indels 0; Gaps 0; Matches 1142; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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DB 61 TGCCTGCCCGCCCAACAGCAGCGCTGTGTTTCCGSGCTGGGCGAGCCCGACAGCAACGCG 120

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DB 121 AGCGCGGCTCGAGGAGCGGAGCTGAGCGCGGACATCTCCCGGCGATCCCGGTC 180

QY 181 ATCATCAGGCGGTCTACTCCGTAGTGTTCGTGGGCTTGGTGGGCAACTCGTGTGTC 240
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QY 241 ATGTTCTGTATCATCCGATACACAAGATGAAGACAGCAACCAATTTACATTTAAC 300
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QY 301 CTGGCTTTGGCAGATCTTTAGTTACTACAACCATGCCCTTTCAGATACGCTTACTTG 360
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QY 1141 TG 1142
DB 1141 TG 1142

RESULT 9
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LOCUS AR141371 1142 bp DNA linear PAT 08-AUG-2001
DEFINITION Sequence 1 from patent US 6146835.
ACCESSION AR141371
VERSION AR141371.1 GI:15100887
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 1142)
AUTHORS Kieffer,B. and Simonin,F.
TITLE Human kappa opioid receptor, nucleic acids and uses thereof
JOURNAL Patent: US 6146835-A 1 14-NOV-2000;
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Source 1..1142
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Query Match 99.0%; Score 1142; DB 6; Length 1142;
Best Local Similarity 100.0%; Pred. No. 3.3e-200; Mismatches 0; Indels 0; Gaps 0;
Matches 1142; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 181 ATCATCAGGCGGTCTACTCCGTAGTGTTCGTGGGCTTGGTGGGCAACTCGTGTGTC 240
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QY 1141 TGA 1143
Db 1141 TGA 1143

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LOCUS AR281680 1284 bp DNA linear PAT 10-APR-2003
DEFINITION Sequence 3 from patent US 6518480.
ACCESSION AR281680
VERSION AR281680.1 GI:29717435
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE
1 (bases 1 to 1284)
UnClassified.
AUTHORS Conklin,B.R.
TITLE Selective target cell activation by expression of a G
protein-coupled receptor activated superiorly by synthetic ligand
JOURNAL Patent: US 6518480-A 3 11-FEB-2003;
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Query Match 98.6%; Score 1137.8; DB 6; Length 1284;
Best Local Similarity 99.8%; Pred. No. 1.9e-199;
Matches 1139; Conservative 0; Mismatches 2; Indels 0; Gaps 0;

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QY 1142 G 1142
Db 1253 G 1253

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LOCUS AX280919 1143 bp DNA linear PAT 02-NOV-2001
DEFINITION Sequence 542 from Patent WO0177172.
ACCESSION AX280919
VERSION AX280919.1 GI:16608215
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominiidae; Homo.
REFERENCE
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Lehmann-Bruinsma, K., Liaw, C.W. and Lin, I.L.
Non-endogenous, constitutively activated known g protein-coupled
receptors
Patent: WO 0177172-A 542 18-OCT-2001;
Arena Pharmaceuticals, Inc. (US)
JOURNAL Location/Qualifiers
FEATURES

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Query Match 98.1%; Score 1131.8; DB 6; Length 1143;
Best Local Similarity 99.4%; Pred. No. 2.5e-198;
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DB 661 TGGTGGACCTCTTCATGAAGATCTGGCTCTTCACTTTGCTTGGTATCCCTGCTCCTC 720

QY 721 ATCATCATGCTGCTACACCTGATGATCTGGCTTCAAGAGCGTCCGGCTCTTTCT 780
DB 721 ATCATCATGCTGCTACACCTGATGATCTGGCTTCAAGAGCGTCCGGCTCTTTCT 780

QY 781 GGCTCCGAGAAAGATTCGCAACCTCGTAGGATCACCAGATGTCCTGGTGGTGGTG 840
DB 781 GGCTCCGAGAAAGATTCGCAACCTCGTAGGATCACCAGATGTCCTGGTGGTGGTG 840

QY 841 GCAGCTTTCGTCGCTGCTGACTCCCATTCACATATTCATCTGTTGGAGGCTCTGGGG 900
DB 841 GCAGCTTTCGTCGCTGCTGACTCCCATTCACATATTCATCTGTTGGAGGCTCTGGGG 900

QY 901 AGCACTCCCAACAGCAGCTGCTCTCTCCAGCTATTACTTCTGCACTGCGCTTAGGCTAT 960
DB 901 AGCACTCCCAACAGCAGCTGCTCTCTCCAGCTATTACTTCTGCACTGCGCTTAGGCTAT 960

QY 961 ACCAAGTAGCTGAATCCCATCTCTACGCTTCTTGATGAAAACTTCAAGCGGTCT 1020
DB 961 ACCAAGTAGCTGAATCCCATCTCTACGCTTCTTGATGAAAACTTCAAGCGGTCT 1020

QY 1021 TTCCGGGACTTCTGCTTTCCTCACTGAAGATGAGGAGCGGCGAGCACTAGCAGATC 1080
DB 1021 TTCCGGGACTTCTGCTTTCCTCACTGAAGATGAGGAGCGGCGAGCACTAGCAGATC 1080

QY 1081 CGAAATACAGTTTACAGATCTCTTACCTGAGGACATCGATGGGATGAATAACAGTA 1140
DB 1081 CGAAATACAGTTTACAGATCTCTTACCTGAGGACATCGATGGGATGAATAACAGTA 1140

QY 1141 TGA 1143
DB 1141 TGA 1143

RESULT 13
AY168006
LOCUS
DEFINITION
Homo sapiens DRG kappa 1 splice variant KOR 1A mRNA, complete cds,
alternatively spliced.
ACCESSION
AY168006
VERSION
AY168006.1 GI:27373027
KEYWORDS
SOURCE
Homo sapiens (human)
ORGANISM
Homo sapiens
Zukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE
1 (bases 1 to 1396)
AUTHORS
Lu, L. D. and Mansson, B.
DIRECT SUBMISSION
Submitted (23-OCT-2002) Molecular Biology, Adolor Corporation, 371
Phoenixville Pike, Malvern, PA 19355, USA
FEATURES
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FAFVPIVLIIVCVTLMLRLKSLGSKRDLRLRLVAVVAVVVCWTPI
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CDS
Query Match 91.7%; Score 1058.4; DB 9; Length 1396;
Best Local Similarity 96.3%; Pred. No. 8.1e-185;
Matches 1111; Conservative 0; Mismatches 1; Indels 42; Gaps 1;

QY 1 ATGGACTCCCGATCCAGATCTTCGCGGGAGCGCGCCCTACTCTGCGCCCGAGCGCC 60
DB 237 ATGGACTCCCGATCCAGATCTTCGCGGGAGCGCGCCCTACTCTGCGCCCGAGCGCC 296

QY 61 TGCCTGCCCGCCCAACAGCAGCGCCCTGTTTCCTCGGCTGGGCGGCGGCAACGCGC 120
DB 297 TGCCTGCCCGCCCAACAGCAGCGCCCTGTTTCCTCGGCTGGGCGGCGGCAACGCGC 314

QY 121 AGCGCGGCTCGGAGGCGCGCAGCTGGAGCGCGGACATCTCCCGGCGATCCCGGTC 180
DB 315 AGCGCGGCTCGGAGGCGCGCAGCTGGAGCGCGGACATCTCCCGGCGATCCCGGTC 374

QY 181 ATCATCAGCGCGCTACTCTCGTAGTGTTCGTCGGGCTTGGTGGGCAACTCGCTGCTC 240
DB 181 ATCATCAGCGCGCTACTCTCGTAGTGTTCGTCGGGCTTGGTGGGCAACTCGCTGCTC 240

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375	ATCATCAGCGCGGTCTACTCCGTAGTGTTCGTCTGGGCTTTGGTGGGCAACTCGCTGGTC	434
241	ATGTTGCTGATCATCCGAVACACAAAAGATGAAGACAGCAACCAACATTTTACATATTAAAC	300
435	ATGTTGCTGATCATCCGATACACAAAGATGAAGACAGCAACCAACATTTTACATATTAAAC	494
301	CTGCGTTTGGCAGAGCTTTAGTTACTACAAACCATGCCCTTTTCAGAGTACGGTCTACTTGG	360
495	CTGCGTTTGGCAGATGCTTTAGTTACTACAAACCATGCCCTTTTCAGAGTACGGTCTACTTGG	554
361	ATGAATTCCTGGCGCTTTTGGGGATGTCTGTCAAGATAGTAATTTTCCATTGATTACTATAC	420
555	ATGAATTCCTGGCGCTTTTGGGGATGTCTGTCAAGATAGTAATTTTCCATTGATTACTATAC	614
421	AACATGTTTACCAGCATCTTTCACCTTGACCATGATGAGCGTGGACCGCTACATGTCGGTG	480
615	AACATGTTTACCAGCATCTTTCACCTTGACCATGATGAGCGTGGACCGCTACATGTCGGTG	674
481	TGCCACCCCGTGAAGGCTTTGGACTTCGCGACACACCCCTTGAAGCAAGATCATCAATATC	540
675	TGCCACCCCGTGAAGGCTTTGGACTTCGCGACACACCCCTTGAAGCAAGATCATCAATATC	734
541	TGCATCTGGCTGTCTCGTTCATCTGTTGGCATCTCTGCAATAGTCCCTTGGAGGACCAAAA	600
735	TGCATCTGGCTGTCTCGTTCATCTGTTGGCATCTCTGCAATAGTCCCTTGGAGGACCAAAA	794
601	GTCAAGGAAGACGTCGATGTCAATTGAGTGTCTCTTGCAGTTCCTCAAGATGATGACTACTCC	660
795	GTCAAGGAAGACGTCGATGTCAATTGAGTGTCTCTTGCAGTTCCTCAAGATGATGACTACTCC	854
661	TGTTGGGACCTTTTCATGAGATCTGGCTTTCATCTTTGCCCTTCGTGATCCCGTCCCTC	720
855	TGTTGGGACCTTTTCATGAGATCTGGCTTTCATCTTTGCCCTTCGTGATCCCGTCCCTC	914
721	ATCATCATCTGTCTACACCTGATGATCCTGCGTCTCAAGACGTCCTCGGCTCCTTTCT	780
915	ATCATCATCTGTCTACACCTGATGATCCTGCGTCTCAAGACGTCCTCGGCTCCTTTCT	974
781	GGTCCCGAGAGAAAGATCGCAACCTCGTAGGATCACAGACTGTCCTGGTGTGGTG	840
975	GGCTCCCGAGAGAAAGATCGCAACCTCGTAGGATCACAGACTGTCCTGGTGTGGTG	1034
841	GCAGTCTTCGTCGTCCTGGATCCCAATTCACATATTTCATCTCTGGTGGAGGCTCTGGGG	900
1035	GCAGTCTTCGTCGTCCTGGATCCCAATTCACATATTTCATCTCTGGTGGAGGCTCTGGGG	1094
901	AGCACTTCCACAGCACAGCTGTCTCTCCAGCTATTACTTCTGCATTCGCTTAGGCTAT	960
1095	AGCACTTCCACAGCACAGCTGTCTCTCCAGCTATTACTTCTGCATTCGCTTAGGCTAT	1154
961	ACCAACAGTAGCCTGAATCCCAATCTCTAGCGCTTTCTTGATGAAACTTCAAGCGGTGT	1020
1155	ACCAACAGTAGCCTGAATCCCAATCTCTAGCGCTTTCTTGATGAAACTTCAAGCGGTGT	1214
1021	TTCCGGGACCTTCGCTTTCCACATCAAGATGAGGATGGAGCGGACAGCACTAGCAGATC	1080
1215	TTCCGGGACCTTCGCTTTCCACATCAAGATGAGGATGGAGCGGACAGCACTAGCAGATC	1274
1081	CGAAATACAGTTCAGGATTCCTGCTTACTCTGAGGACATCGATGGGATGAATAAACAGTA	1140
1275	CGAAATACAGTTCAGGATTCCTGCTTACTCTGAGGACATCGATGGGATGAATAAACAGTA	1334
1141	TGACTAGTCGTGGA	1154
1335	TGACTAGTCGTGGA	1348

RESULT	14
AR281681	
LOCUS	AR281681
DEFINITION	Sequence 5 from patent US 6518480.
ACCESSION	AR281681
VERSION	AR281681.1 GI:29717436
DNA	linear
PAT	10-APR-2003

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KEYWORDS
SOURCE
  ORGANISM
REFERENCE
  AUTHORS
  TITLE
  JOURNAL
FEATURES
  source
    Unknown.
    Unknown.
    Unknown.
    Unclassified.
    1 (bases 1 to 1275)
    Conklin,B.R.
    Selective target cell activation by expression of a G
    protein-coupled receptor activated superiorly by synthetic ligand
    Patent: US 6518480-A 5 11-FEB-2003;
    Location/Qualifiers
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ORIGIN	Query Match	86.7%; Score 1001; DB 6; Length 1275;
	Best Local Similarity 93.1%; Pred. No. 3e-174;	
	Matches 1062; Conservative 0; Mismatches 70; Indels 9; Gaps 1	
QY	2 TGGACTCCCGATCCAGATCTTCGGGGGAGCGGGCCCTACCTCGCGCCCGAGCGGCT 61	
Db	113 TCGACTCCCGATCCAGATCTTCGGGGGAGCGGGCCCTACCTCGCGCCCGAGCGGCT 172	
QY	62 GCTGCGCCCGCAACAGCAGCGCTGGTTCGGGCTGGCGGAGCCCGACAGCAACGGCA 121	
Db	173 GCCTGCGCCCGCAACAGCAGCGCCCTGGTTCGGGCTGGGGCGAGCCCGACAGCAACGGCA 232	
QY	122 GCGCGGCTCGGAGGACGCGCAGCTGAGCGCCGCGCACATCTCCCGCGCCATCCCGGTCA 181	
Db	233 GCGCGGCTCGGAGGACGCGCAGCTGAGCGCGGCGCACATCTCCCGCGCATCCCGGTCA 292	
QY	182 TCATCAGCGGGGTCTACTCCGTAGTGTTCGTGFGGGCTTGGTGGGCAACCTCGCTGTGTCA 241	
Db	293 TCATCAGCGGGGTCTACTCCGTAGTGTTCGTGFGGGCTTGGTGGGCAACCTCGCTGTGTCA 352	
QY	242 TGTTCGTGATCCTCCGATACACAAAGATGAAGACAGCAACCAACATTTACATATTAAAC 301	
Db	353 TGTTCGTGATCCTCCGATACACAAAGATGAAGACAGCAACCAACATTTACATATTAAAC 412	
QY	302 TGGCTTTGGCAGATGCTTTAGTTACTACAACATGCGCCTTTCAGAGTACGGTCTACTTGA 361	
Db	413 TGGCTTTGGCAGATGCTTTAGTTACTACAACATGCGCCTTTCAGAGTACGGTCTACTTGA 472	
QY	362 TGAATTCCTGGCCTTTGGGATGCTGTGTCAGATAGTAATTTCCATTTCATTACTACTACA 421	
Db	473 TGAATTCCTGGCCTTTGGGATGCTGTGTCAGATAGTTCATTTCCATTTCATTACTACTACA 532	
QY	422 ACATGTTTCAACAGCATCTTCACCTTGACCATGATGAGCGTGGACCGTTCATTCGCGGT 481	
Db	533 ACATGTTTCAACAGCATCTTCACCTTGACCATGATGAGTGTGGACCGTTCATTCGCGGT 592	
QY	482 GCGACCCCGTGAAGCTTTGGACTTTCGCGCACCCCTTGAAGGCAAGATCATCAATATCT 541	
Db	593 GCGACCCCGTGAAGCTTTGGATTTCCGACACCTTTTGAAGCAAGATCATCAACATCT 652	
QY	542 GCATCTGGCTGCTGCTGCATCTGTTGGCATCTTCGAATAGTCCCTTGGAGGCAACCAAG 601	
Db	653 GCATTTGGCTACTGGCATCATCTGTTGGTATATCAGCGATAGTCTTTGGGGTGAACCAAC 712	
QY	602 TCAGGGAAGAGTCGATGTCAATTAGTGTCTTTCAGTGTCCCTTGCAGTATCCAGATGATGACTACTCT 661	
Db	713 CCCGGGATGGAGCAGTGGTATGACGCTCCAGTTCCTCCGAGCCC-----CAGCTGGT 763	
QY	662 GGTGGGACCTCTTCATGAAGATCTGCGTCTTTCATCTTTTGCCTTCGTGATTCCTGTGCTCA 721	
Db	764 ACTGGGACCTGTGACCAAGATCTGCGTCTTCATCTTTGCTTTCGTGATTCCTGTGCTCA 823	
QY	722 TCATCATGCTGTGTACACCTGATGATCTCGGTCTCAAGAGCGTCCGGCTCCTTTCTG 781	
Db	824 TCATCATGCTGTGTACACCTGATGATCTCGGTCTCAAGAGCGTCCGGCTCCTTTCTG 883	
QY	782 GCTCCCGAGAGAAAGATCGCAACCTGGTAGGATCACCAAGACTGCTCTCGTGTGGTGGTGG 841	

for Advanced Studies; c/o Shimadzu Corporation N-80, 1
Nishinokyo-Kawahara-cho, Kyoto 604, Japan (Tel.81-75-823-1208,
Fax:81-75-811-8186)

FEATURES

Location/Qualifiers

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CHPVKALFRPLKAKINICILLASVGLSAIVLGGTKVREDVDVIECSLQFPDDE
YSWDLFNKICVFAFVIVPVLIIIVCYTLMILKLSVRLSSREXDRNLRIITLV
LVVAVFTICWTPIHIFILVEALGSTSHSTAVLSYFICALGYTNSLSNPVLYAFID
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ORIGIN

Query Match 79.2%; Score 914; DB 10; Length 1273;

Best Local Similarity 87.0%; Fred. No. 3.1e-158;

Matches 1004; Conservative 0; Mismatches 150; Indels 0; Gaps 0;

QY 1 ATGGACTCCCGGATCCAGATCTTCGGCGGAGCGGGCCCTACTCGCGCCCGAGCGCC 60
DB 49 ATGGAGTCCCCATCCAGATTTCCGGCGAGAGCGGCCCTACTCTGCTCCAGTGCT 108
QY 61 TGCCTGCCCCCAACAGAGCGCTGTTTCCGGCTGGCGGAGCCCGAGCAAGCGGC 120
DB 109 TGCCTACTCCCAACAGAGCGCTTGGTTTCCCAACTGGCGGGAATCGGACGCAATGGC 168
QY 121 AGCGCGGCTCGGAGAGCGCGAGCTGGAGCGCGGCACATCTCCCGGCCATCCCGGTC 180
DB 159 AGTGTGGCTCGAGGACACAGCTGGAGCGCGGCACATCTCTCAGGCATCCCTGTT 228
QY 181 ATCATCAGCGGCTTACTCGTAGTGTCTGCTGGGCTGGTGGCAACTCGCTGGTC 240
DB 229 ATCATCAGCGGCTTACTCTGTGTGTGTGTGTGGGCTTAGTGGGCAATTCCTGGTC 288
QY 241 ATGTCGTGATCCCGATACACAAAGATGAAGACAGCAACCAACATTTACATTTAAC 300
DB 289 ATGTTGTGATCCCGATACACAAAGATGAAGACCGCAACCACTACATTTAAC 348
QY 301 CTGGCTTGGCAGATGCTTTAGTTACTAACCACTGCGCTTTCAGAGTACGGTCTACTTG 360
DB 349 CTGGCTTGGCAGATGCTTTGGTTACTACCACTATGCGCTTCCAGAGTGTGCTACTTG 408
QY 361 ATGATTTCTGGCTTTTGGGATGCTGTGCAAGATAGTAAATTTCCATTTACTATC 420
DB 409 ATGAATTTCTGGCTTTTGGGATGCTGTGCAAGATGCTGATTTCCATTTACTACTAC 468
QY 421 AACATGTTCCAGCATCTTCCACCTTGACCATGATGAGCGTGGACCGCTACATTCGCGTG 480
DB 469 AACATGTTCCAGCATCTTCCACCTTGACCATGATGAGTGTGACCGCTACATTCGCGTG 528
QY 481 TGCACCCCGTGAAGGCTTTGGATCTTCGCAACCCCTTGAAGGCAAGATCATCAATC 540
DB 529 TGCACCCCGTGAAGGCTTTGGATTTCCGAACACCTTTTGAAGCAAGATCATCAATC 588
QY 541 TGCATCTGGCTGCTGCTGCTCATCTGTTGGCATCTCTGCAATAGTCTTGGAGGCCAACA 600
DB 589 TGCATTTGGCTACTGGCATCATCTGTTGGTATATACGGATAGTCTTGGAGGCCAACA 648

QY 601 GTCAGGAGAGAGCTGCATGCTCATTGAGTCTCTTGCAGTTCCTCCAGATGATGACTACTCC 560
DB 649 GTCAGGAGAGAGTGTGATGTGATGTAATGCTCTTGCAGTTCCTCCAGATGATGAAATATCC 708
QY 661 TGGTGGGACCTCTTTCATGAAGATCTCGCTTTCATCTTTGCTTTCCTGATCCCTGCTCTC 720
DB 709 TGGTGGGACCTCTTTCATGAAGATCTGTGTCTTTCGCTTTCCTGATCCCTGCTCTA 768
QY 721 ATCATCATGCTGTGTACACCTGATGATCTCGGCTTTCAGAGCGTCCGGCTCTCTTCT 780
DB 769 ATCATCATGCTGTGTACACCTGATGATCTCGGCTTTCAGAGCGTCCGGCTCTCTCG 828
QY 781 GGCTCCCGAGAGAGATCGCAACCTGCGTAGATCACAGACTGCTCTGCTGTGTGTGTG 840
DB 829 GGCTCTCGAGAGAGAGACCGAATCTCCGCGGATCACCAAGCTGGTGTGTGTGTGTT 888
QY 841 GAGTCTTCTGCTGTGTGAGTCCCATTCATATTCATCTCTGCTGGAGGCTCTGGGG 900
DB 889 GCACTTCTCATCATCTGTTGGACCCCATCCACATCTTATCTCTGCTGAGGCTCTAGGC 948
QY 901 AGCACTCTCCAGAGACAGCTGCTCTCTCCAGCTATTAATCTGCTGATCGCTTAGGCTAT 960
DB 949 AGCACTCTCCAGAGACAGCTGCTCTCTAGCTATTAATCTGCTGATGCTCTGGGTTAT 1008
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DB 1009 ACCAAGTAGGCTGAATCTCTCTCTATGCTTCTTGTATGAAAGCTTCAAGCGGTT 1068
QY 1021 TTCCGGGACTTCTGCTTTCCTGAGTGAAGTGGAGCGGACAGACACTAGCAGATC 1080
DB 1069 TTAGGAGCTTCTGCTTCCCATTAAGATGCAATGGAGCGGACAGACAAACAGATTT 1128
QY 1081 CGAATATACAGTTTCAGGATCTCTGCTTACCTGAGGACATCGATGGGATGAATAACAGTA 1140
DB 1129 AGAAGACAGATTCAGATCTCTCCATGAGGATGTTGGGATGAATAAGCAGTA 1188
QY 1141 TGACTAGTCTGGA 1154
DB 1189 TGACTAGTCTGGA 1202

RESULT 18

RATKORIA

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

REFERENCE

AUTHORS

TITLE

JOURNAL

MEDLINE

PUBMED

COMMENT

FEATURES

Source

CDS

RATKORIA 1358 bp mRNA linear ROD 21-OCT-1993
Rat kappa opioid receptor mRNA, complete cds.
L22001
L22001.1 GI:409236
kappa opioid receptor; opioid receptor.
Rattus norvegicus (Norway rat)
Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.
1 (bases 1 to 1358)
Chen, Y., Mestek, A., Liu, J. and Yu, L.
Molecular cloning of a rat kappa opioid receptor reveals sequence
similarities to the mu and delta opioid receptors
Biochem. J. 295 (Pt 3), 625-628 (1993)
94059008
8240267
Original source text: Rattus norvegicus whole brain cDNA to mRNA.
Location/Qualifiers
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YSWMDLFMKICVFVFAFVPIIIVCTVLMILKSLVRLSSREKDRNRITKLIV
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ORIGIN		Query Match 79.2%; Score 914; DB 10; Length 1358;
		Best Local Similarity 87.0%; Pred. No. 3.1e-158;
		Matches 1004; Conservative 0; Mismatches 150; Indels 0; Gaps 0;
Qy	1	ATGACTCCCGATCCAGATCTTCGCGGGGAGCGGSCCTACTCGCGCCCGCAGCGCC 60
Db	71	ATGGAGTCCCGATCCAGATTTTCGCGAGAGCAGGCCCTACTGTGCTCCAGTGTCT 130
Qy	61	TGCTGCCCCCAACAGCAGCGCCCTGTGTTTCCCGCTGGCGCGAGCCGACAGCAACGGC 120
Db	131	TGCTACTCCCAACAGCAGCGCTTGTGTTTCCCACTGGCGCGAATCGACAGCAATGGC 190
Qy	121	AGCGCGGCTCGAGAGCGCAGCTGGAGCGCGGCATCTCCCGCCCATCCCGGTC 180
Db	191	AGTGGGCTCGAGAGCAGCAGCTGGAGCGCGGCATCTCTCCAGCCATCCCTGTT 250
Qy	181	ATCATCAGCGGCTCTACTCCGTAAGTGTTCGTCGTCGTCGTCGTCGTCGTCGTC 240
Db	251	ATCATCAGCGGCTCTACTCTGTGCTGTTGTGGTGGCTTAGTGGGCAATCCCTGTC 310
Qy	241	ATGTTCTGTGATCATCCGATACACAAAGATGAAGACAGCAACCAATTTACATTTAAC 300
Db	311	ATGTTTGTGATCATCCGATACACAAAGATGAAGACCGCAACCAATTTACATTTAAC 370
Qy	301	CTGGCTTTGGCAGATCTTACTACTACAACCATGCCCTTCAGATACGCTTACTTGT 360
Db	371	CTGGCTTTGGCAGATCTTGTGTTTACTACCATATGCCCTTCAGATGCTGCTACTTG 430
Qy	361	ATGAATTCCTGGCCTTTTGGGATGCTGTCTCAAGATAGTAATTTCAATGATATAC 420
Db	431	ATGAATTCCTGGCCTTTTGGAGATGTTCTGTCAAGATTTGTCAATTTCCATGACTAC 490
Qy	421	ACATGTTACAGCATCTTCACTTGACCATGATGAGCGGTGAGCGGTACATCCCGTG 480
Db	491	ACATGTTTACAGCATATTCACCTTGACCATGATGAGGTGAGCGGTACATCCCGTG 550
Qy	481	TGCCACCCGCTGAAGCTTTGACCTTCGACACACCTTCGAGCGCAAGATCATCAATATC 540
Db	551	TGCCACCCGCTGAAGCTTTGGATTTCCGACACACCTTTGAAAGCAAGATCATCAATC 610
Qy	541	TGATCTGGCTGTGCTGCTACTCTGTGTCATCTCTGCAATAGTCTTGGAGGACCAAA 600
Db	611	TGATTTGGCTACTGGCATCATCTGTGTGTATATCAGCGATAGTCTTGGAGGACCAAA 670
Qy	601	GTCAAGGAAGAGTGGATGCTCATTGATGCTCTTGCAGTTCAGATGATGACTACTCC 660
Db	671	GTCAAGGAAGAGTGGATGCTCATGATGCTCTTGCAGTTCCTGATGATGATATCC 730
Qy	661	TGTTGGGACCTTTCATGAAGATCTCGGTCTTCAATCTTTGCCCTTGTGATCCCTGCTC 720
Db	731	TGTTGGGACCTTTCATGAAGATCTGTGCTTGTGCTTGTGCTTGTATCCCTGCTCTA 790
Qy	721	ATCATCATGCTGTCTACACCTGATGCTCGCTCAAGAGCGTCCGGCTCTTCTCT 780
Db	791	ATCATCATGCTGTCTACACCTGATGCTCGCTTGAAGAGTCTCGGCTCTCTCTCG 850
Qy	781	GGCTCCCGAGAGAAAGATCGCAACCTCGCTAGGATCACCAGACTGGTCTGTGGTGGTG 840
Db	851	GGCTCTCGAGAGAGGACCGAATCTCCGCGGATCACCAGCTGGTGTGTGTGTGTGT 910
Qy	841	GCAGTCTTCTGCTGTGCTGATCTCCCATTCATATTTATCTGTGTGAGGCTCTGGGG 900
Db	911	GCAGTCTTCTATCATCTGTGTGACCCCATCCACATCTTTATCTGTGTGAGGCTCTAGGC 970

Qy	901	AGCACCTCCACAGCAGCTGCTCTCTCCAGCTATTACTTCTGCATCGCCTTAGGCTAT 960
Db	971	AGCACCTCCACAGCAGCTGCTCTCTCTAGCTATTACTTCTGCATTCCTTGGGTTAT 1030
Qy	961	ACCAACAGTAGCTGAATCCCATCTCTAGGCTTCTTGTAGTGAATCTCAAGCGGTCT 1020
Db	1031	ACCAACAGCAGCTGAATCCTGTCTCTATGCTTCTTGTAGTGAATCTCAAGCGGTCT 1090
Qy	1021	TTCCGGGACTTCTGCTTTTCCACTGAAGATGAGGATGAGCGGCGAGCAGCTAGCAGATC 1080
Db	1091	TTTAGGACTTCTGCTTTTCCCATTAAGATGCGAATGGAGCGCCAGACAGACAGAT 1150
Qy	1081	CGAAATACAGTTCCAGATCTGCTTACCTTACCTGAGGACATCGATGGGATGAATAACAGTA 1140
Db	1151	AGAAACACAGTTCCAGATCTGCTTCCATGAGGATGCTGGTGGGATGAATAAGCCAGTA 1210
Qy	1141	TGACTAGTCTGGA 1154
Db	1211	TGACTAGTCTATGA 1224
RESULT 19		
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LOCUS		4742 bp mRNA linear ROD 25-MAY-1994
DEFINITION		Rattus norvegicus kappa opioid receptor mRNA, complete cds.
ACCESSION		U00442
VERSION		U00442.1 GI:403486
KEYWORDS		
SOURCE		Rattus norvegicus (Norway rat)
ORGANISM		Rattus norvegicus
REFERENCE		1 (bases 1 to 4742)
AUTHORS		Meng, F., Xie, G.X., Thompson, R.C., Mansour, A., Goldstein, A., Watson, S.J. and Akil, H.
TITLE		Cloning and pharmacological characterization of a rat kappa opioid receptor
JOURNAL		Proc. Natl. Acad. Sci. U.S.A. 90 (21), 9954-9958 (1993)
MEDLINE		94052210
PUBMED		8234341
REFERENCE		2 (bases 1 to 4742)
AUTHORS		Meng, F.
TITLE		Direct Submission
JOURNAL		Submitted (05-AUG-1993) Pan Meng, Mental Health Research Institute, University of Michigan, 205 Zina Pitcher Place, Ann Arbor, Michigan 48109, USA
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ORIGIN

Query Match 79.1%; Score 912.4; DB 10; Length 4742;
 Best Local Similarity 86.9%; Pred. No. 6e-158;
 Matches 1003; Conservative 0; Mismatches 151; Indels 0; Gaps 0;

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 DB 317 TGCCTACTCCCGGAGCGCGCCCTGTTTCCCGCTGGCGGAGCGCGCCCGGAGGCC 376
 QY 121 AGCGCGGCTCGGAGCGCGCGCTGGAGCGCGCGGACATCTCCCGGCCATCCCGTC 180
 DB 377 AGTGTGGCTCCGAGCACAGCAGCTGGAGCGCGCGGACATCTCCCGGCCATCCCGTC 436
 QY 181 ATCATCAGCGCGCTACTCCGATGTTGCTGCTGGCTTGGTGGGCAACTCCGTCGTC 240
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 QY 421 AACATGTTACAGCATCTTCCATTTGACATGATGAGCGGACCGCTACATTCGCGTG 480
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 QY 901 AGCACTCCCAACAGCAGTGTCTCTCCAGATTTACTTCTGATGCTTCTGATGCTTCTGAT 960
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RESULT 20
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 VERSION
 S81111.1 GI:1478285
 SOURCE
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 ORGANISM
 Mus sp.
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 REFERENCE
 1 (bases 1 to 1288)
 Belkowski, S.M., Zhu, J., Liu-Chen, L.Y., Eisenstein, T.K., Adler, M.W.
 and Rogers, T.J.
 TITLE
 Sequence of kappa-opioid receptor cDNA in the R1.1 thymoma cell
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 J. Neuroimmunol. 62 (1), 113-117 (1995)
 JOURNAL
 MEDLINE
 PUBMED
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 entry (NCBI gi175931) from the original journal article.
 This sequence comes from Fig. 3.
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ORIGIN

Query Match 78.9%; Score 910.8; DB 10; Length 1288;
 Best Local Similarity 86.8%; Pred. No. 1.2e-157;
 Matches 1002; Conservative 0; Mismatches 152; Indels 0; Gaps 0;

QY 1 ATGGACTCCCGGATCCAGATCTTCCGCGGAGCGCGCCCTACCTGCGCCCGGAGGCC 60
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 DB 157 TGCCTTCTCCCGGAGCGCGCTGTTTCCCGCTGGCGGAGCGCGCCCGGAGGCC 216
 QY 121 AGCGCGGCTCGGAGCGCGCGCTGAGCGCGCGGACATCTCCCGGCAATCCCGTCT 180
 DB 217 AGTGTGGCTCAGAGGATCAGCAGTCCGAGTCCCGGACATCTCTCCGGGCAATCCCTGTT 276


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QY 181 ATCATCAAGCGGTCTACTCCGTAGTGTTCGTGCGGCTTGGTGGCAACTCGTGTGC 240
DB 182 ATCATCAAGCGGTCTACTCCGTAGTGTTCGTGCGGCTTGGTGGCAACTCGTGTGC 240
QY 277 ATCATCAAGCGGTCTACTCCGTAGTGTTCGTGCGGCTTGGTGGCAACTCGTGTGC 336
DB 278 ATCATCAAGCGGTCTACTCCGTAGTGTTCGTGCGGCTTGGTGGCAACTCGTGTGC 336
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DB 362 ATGAATTCCTGCGCTTGGGATGCTGTGCAAGATGAGTAAATTCATTTGATTTATAC 420
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A68828

LOCUS

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Sequence 5 from Patent WO9802534.

A68828

VERSION A68828.1 GI:4759756

KEYWORDS

SOURCE unidentified

ORGANISM unidentified

REFERENCE 1. (bases 1 to 1408)

Kieffer,B.L., Matches,H.W., Simonin,F.H., Dierich,A. and Lemeur,M.

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Patent: WO 9802534-A 5 22-JAN-1998;

CENTRE NAT RECH SCIENT (FR)

Other publication FR 2750825 19980116.

COMMENT Location/Qualifiers

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ORIGIN

Query Match

Best Local Similarity

Matches 1002; Conservative

78.9%; Score 910.8; DB 6;

Length 1408;

Pred. No. 1.2e-157;

Indels 0; Gaps 0;

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244 TGCCTTCTCCCAACAGCAGCTCTTGTGTTCCCACTGGGCGAGATCCGACAGTAATGCG 303

121 AGCGCGGCTCGGAGGAGCGGAGCTGAGCGCGGCGGAGCTCCCGGCGCATCCCGGTC 180

304 AGTGGGCTCAGAGGATCAGCTGAGTCCGCGGAGCTCTCCGCGCATCCCTGTT 363

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364 ATCATCAGCGGCTTACTCCGTAGTGTTCGTGCGGCTTGGTGGCAACTCTCTGCTC 423

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301 CTGGCTTTGGCAGATGCTTACTACTACCAACCATGCGCTTTCAGAGTACGCTTACTTG 360

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361 ATGAATTCCTGCGCTTGGGATGCTGCTGCAAGATAGTAAATTTCCATTTGATTTATAC 420

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REFERENCE
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Patent: US 6632977-A 5 14-OCT-2003;
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ORIGIN
Query Match 78.9%; Score 910.8; DB 6; Length 1408;
Best Local Similarity 86.8%; Pred. No. 1.2e-157;
Matches 1002; Conservative 0; Mismatches 152; Indels 0; Gaps 0;
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184 ATGAGTCTCCCGATCCAGATCTTCCGAGGAGATCCAGGCCCTACCTGCTCTCCAGTGTCT 243
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DEFINITION Sequence 1 from patent US 6096513.
ACCESSION AR105149
VERSION AR105149.1 GI:12818746
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 1410)
AUTHORS Bell, G.I., Reisine, T. and Yasuda, K.
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Best Local Similarity 86.8%; Pred. No. 1.2e-157;
Matches 1002; Conservative 0; Mismatches 152; Indels 0; Gaps 0;

QY 1 ATGGACTCCCGATCAGATCTTCGCGGGAGCCGGCCCTACCTGCGCCCGAGCGCC 60
Db 186 ATGGAGTCCCGCATTCAGATCTTCGAGGAGATCCAGGCCCTACCTGCTCCCAAGTGT 245
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Db 306 AGTGTGGGCTCAGAGATCAGCAGCTGGAGTCCGCGCAGCATCTCTCCGGCCATCCCTGT 365
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Db 486 CTGGCTTTGGCAGATGCTTTAGTTACTACACCATGCCCTTTTCAGAGTACGCTCTACTTG 545
QY 361 ATGAATTCCTGGCTTTTGGGATGTGCTGTCAAGATAGTAAATTTCCATTGATTACTAC 420
Db 546 ATGAATTCCTGGCTTTTGGGATGTGCTGTCAAGATAGTAAATTTCCATTGATTACTAC 605
QY 421 AACATGTTACCAAGCATCTTCACTTACCATGATGAGCGTGGACCGCTACATTCGCGTG 480
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QY 481 TGCACCCCGTGAAGCTTTGGACTTCCGACACCTTTGAAGCAAGATCATCAATATC 540
Db 666 TGCACCCCGTGAAGCTTTGGACTTCCGACACCTTTGAAGCAAGATCATCAATATC 725
QY 541 TGCATCTGGCTGTGCTGTCTATCTGTGGCATCTCTGCAATAGTCTTTGGAGCAGCAAA 600
Db 726 TGCATTTGGCTCTCTGGCATCATCTGTGGTATATCAGCGATAGTCTCTGGAGCAGCAAA 785
QY 601 GTAGGGAAGAGCTGATGTCTATGAGTGTCTCTGAGTGTCTCTGAGTATGATGATCTCC 660
Db 786 GTAGGGAAGAGTGTGATGTCTATGAGTGTCTCTGAGTGTCTCTGAGTATGATGATCTCC 845
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ACCESSION AR178399
VERSION AR178399.1 GI:20219537
KEYWORDS Unknown.
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 1410)
AUTHORS Bell, G.I., Reisine, T. and Yasuda, K.
TITLE Nucleic acids encoding kappa opiod receptors
JOURNAL Patent: US 6319686-A 1 20-NOV-2001;
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ORIGIN
Query Match 78.9%; Score 910.8; DB 6; Length 1410;
Best Local Similarity 86.8%; Pred. No. 1.2e-157;
Matches 1002; Conservative 0; Mismatches 152; Indels 0; Gaps 0;

QY 1 ATGAGTCTCCCGATCCAGATCTTCGCGGGAGCGCGGCTTCTGCGCCCGAGCGCC 60
Db 186 ATGAGTCTCCCGATCCAGATCTTCGAGGAGATCCAGGCCCTACCTGCTCTCCAGTGT 245
QY 61 TGCCTGCCCGCCCAAGCAGCAGCGCTGTTTCCCGGCTGGCGCGAGCCCGCAGCAACGGC 120
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RESULT 25
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 LOCUS

DEFINITION Mouse kappa opioid receptor mRNA, complete cds.
 ACCESSION L11065
 VERSION L11065.1 GI:348248
 KEYWORDS kappa opioid receptor.
 SOURCE Mus musculus (house mouse)
 ORGANISM Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 REFERENCE 1 (bases 1 to 1410)
 AUTHORS Yasuda,K., Raynor,K., Kong,H., Breder,C.D., Takeda,J., Reisine,T. and Bell,G.I.
 TITLE Cloning and functional comparison of kappa and delta opioid receptors from mouse brain
 JOURNAL Proc. Natl. Acad. Sci. U.S.A. 90 (14), 6736-6740 (1993)
 MEDLINE 93342064
 PUBMED 8393575
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 ORIGIN
 Query Match 78.9%; Score 910.8; DB 10; Length 1410;
 Best Local Similarity 86.8%; Pred. No. 1.2e-157;
 Matches 1002; Conservative 0; Mismatches 152; Indels 0; Gaps 0;
 QY 1 ATGGAATCCCGCATCCAGATCTTCGCGGGAGCGCGGCTTACCTGCGCGCCGAGCGCC 60
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RESULT 28

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 LOCUS Rattus norvegicus mRNA for kappa opioid receptor, complete cds.
 DEFINITION
 ACCESSION D16829.1 GI:404115
 VERSION kappa opioid receptor.
 KEYWORDS Rattus norvegicus (Norway rat)
 SOURCE Rattus norvegicus
 ORGANISM

RATKOR 2481 bp mRNA linear RCD 04-FEB-1999
 Rattus norvegicus mRNA for kappa opioid receptor, complete cds.

D16829.1 GI:404115

kappa opioid receptor.

Rattus norvegicus (Norway rat)

Rattus norvegicus

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
 Rattus.

1. (bases 1 to 2481)

Minami.M., Toya.T., Katao.Y., Maekawa.K., Nakamura.S., Onogi.T.,
 Kaneko.S. and Satoh.M.

Cloning and expression of a cDNA for the rat kappa-opioid receptor
 FEBS Lett. 329 (3), 291-295 (1993)

93374033

8103466

2. (bases 1 to 2481)

Minami.M.

Direct Submission

Submitted (21-JUL-1993) Masabumi Minami, Faculty of pharmaceutical
 Sciences, Kyoto University, Department of Pharmacology; Kyoto,
 Kyoto 606-01, Japan (E-mail: f51250@sakura.kudpc.kyoto-u.ac.jp,
 Tel:075-753-4546, Fax:075-753-4586)

Submitted (21-JUL-1993) to DDBJ by:

Masabumi Minami

Department of Pharmacology

Faculty of pharmaceutical Sciences

Kyoto University

Kyoto, Kyoto 606-01

Japan

Phone: 075-753-4546

Fax: 075-753-4586.

Location/Qualifiers

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ORIGIN

Query Match 78.9%; Score 910.8; DB 10; Length 2481;
 Best Local Similarity 86.8%; Pred. No. 1.2e-157;
 Matches 1002; Conservative 0; Mismatches 152; Indels 0; Gaps 0;
 QY 1 ATGGACTCCCGATCCAGATCTTCCGGGGAGCGCGCCCTACCTGCGCGCCGAGCGGC 60
 Db 111 ATGGAGTCCCCCATCCAGATTTTCCCGGGAGAGCCAGGCCCTACCTGTGCTCCCAATGCT 170
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 Mammalia; Eutheria; Cetartiodactyla; Suina; Suidae; Sus.
 Pampusch, M.S., Zilliox, M., Osinski, M.A., Brown, D.R. and
 Murtaugh, M.P.
 Distribution of delta and kappa opioid receptor mRNA in porcine
 immune tissues
 Unpublished
 2 (bases 1 to 715)
 Pampusch, M.S.
 Direct Submission
 Submitted (01-JUL-1997) Veterinary Pathobiology, University of
 Minnesota, 1971 Commonwealth Ave, 205 Veterinary Science, St. Paul,
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 Best Local Similarity 89.2%; Pred No. 6.3e-99;
 Matches 638; Conservative 0; Mismatches 77; Indels 0; Gaps 0;
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 Homo sapiens chromosome 8 clone RP11-911H4 map 8, WORKING DRAFT
 SEQUENCE, 3 unordered pieces.
 AC083844
 AC083844.2 GI:12229355
 VERSION
 HTG; HTGS_PHASE1; HTGS_DRAFT.
 KEYWORDS
 SOURCE
 ~ORGANISM
 Homo sapiens
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
 1 (bases 1 to 179356)
 Birren, B., Linton, L., Nusbaum, C. and Lander, E.
 Homo sapiens chromosome 8, clone RP11-911H4
 Unpublished
 2 (bases 1 to 179356)
 Birren, B., Linton, L., Nusbaum, C., Lander, E., Abraham, H., Allen, N.,
 Anderson, S., Barna, N., Bastien, V., Bada, F., Boguslavsky, L.,
 Bouckhalter, B., Brown, A., Burkett, G., Campopiano, A., Castle, A.,
 Choquel, Y., Colangelo, M., Collins, S., Collamore, A., Cooke, P.,
 DeArlano, K., Dewar, K., Diaz, J.S., Dodge, S., Ferreira, P.,
 Fitzhugh, W., Gage, D., Galagan, J., Gardyna, S., Ginde, S., Goyette, M.,
 Graham, L., Grand-Pierre, N., Hagos, B., Heaford, A., Horton, L.,
 Iliev, I., Johnson, R., Jones, C., Kann, L., Karatas, A., LaRoque, K.,
 Lamazares, R., Landers, T., Lehoczy, J., Levine, R., Lieu, C., Liu, G.,
 MacDonald, P., Maquis, N., McCarthy, M., McEwan, P., McKernan, K.,
 McPheeters, R., Meldrim, J., Meneus, L., Mihova, T., Mlenga, V.,
 Morrow, J., Murphy, T., Naylor, J., Norman, C.H., O'Connor, T.,
 O'Donnell, P., O'Neill, D., Oliver, T.M., Oliver, J., Peterson, K.,
 Pierre, N., Pisan, C., Pollara, V., Raymond, C., Rieback, M., Riley, R.,
 Rogov, P., Rothman, D., Roy, A., Santos, R., Schauer, S., Severy, P.,
 Sounez, C., Spencer, B., Stange-Thomann, N., Stojanovic, N.,
 Strauss, N., Subramanian, A., Talamas, J., Tesfaye, S., Theodore, J.,
 Tirrell, A., Travers, M., Trigilio, J., Vassiliev, H., Viel, R., Vo, A.,
 Wilson, B., Wu, X., Wyman, D., Ye, W.J., Young, G., Zainoun, J.,
 Zimmer, A. and Zody, M.
 Direct Submission
 TITLE
 JOURNAL
 COMMENT
 Submitted (03-OCT-2000) Whitehead Institute/MIT Center for Genome
 Research, 320 Charles Street, Cambridge, MA 02141, USA
 On Jan 15, 2001 this sequence version replaced gi:10518402.
 All repeats were identified using RepeatMasker.
 Smit, A.F.A. & Green, P. (1996-1997)
 http://ftp.genome.washington.edu/RM/RepeatMasker.html
 ----- Genome Center
 Center: Whitehead Institute/ MIT Center for Genome Research
 Center code: WIBR
 Web site: http://www-seq.wi.mit.edu
 Contact: sequence_submissions@genome.wi.mit.edu
 ----- Project Information
 Center project name: L11338
 Center clone name: 911_H4
 ----- Summary Statistics
 Sequencing vector: Plasmid; n/a; 100% of reads
 Chemistry: Dye-terminator Big Dye; 100% of reads
 Assembly program: Phrap; version 0.960731
 Consensus quality: 178471 bases at least Q40
 Consensus quality: 179001 bases at least Q30
 Consensus quality: 179111 bases at least Q20
 Insert size: 182000; agarose-fp
 Insert size: 179156; sum-of-contigs

Cook, A., Cooke, P., DeArellano, K., Dewar, K., Diaz, J.S., Dodge, S.,
 Faro, S., Ferreira, P., Fitzgerald, M., Gage, D., Galagan, J.,
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 Viel, R., Vo, A., Wilson, B., Wu, X., Wyman, D., Young, G., Zainoun, J.,
 Zembek, L., Zimmer, A. and Zody, M.
 Direct Submission
 Submitted (30-JUL-2002) Whitehead Institute/MIT Center for Genome
 Research, 320 Charles Street, Cambridge, MA 02141, USA
 On Jul 30, 2002 this sequence version replaced GI:21431154.
 All repeats were identified using RepeatMasker:
 Smit, A.F.A. & Green, P. (1996-1997)
 http://ftp.genome.washington.edu/RM/RepeatMasker.html
 ----- Genome Center
 Center: Whitehead Institute/ MIT Center for Genome Research
 Center code: WIER
 Web site: http://www-seq.wi.mit.edu
 Contact: sequence_submissions@genome.wi.mit.edu
 ----- Project Information
 Center project name: L2157
 Center clone name: 162_D_9

TITLE JOURNAL COMMENT

FEATURES source

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Query Match

47.3%; Score 546; DB 9; Length 183519;

Best Local Similarity 100.0%; Pred.No. 1,7e-90;

Matches 546; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 609 AGACGTGATGTCATTGAGTGTCTCTTCCAGTATCCAGATGATGACTACTCTCTGTGGGA 668

DB 111190 AGACGTGATGTCATTGAGTGTCTCTTCCAGTATCCAGATGATGACTACTCTCTGTGGGA 111131

QY	601	GTCCAGGAAGACGTCGATGTCATTGAGTGTCTCTTGCAGTCTCCAGATGATGACTACTCC	660
Db	720	-----GACGAACAATGGCAGCAGAGTGTCTGCAGTTTCCA---GACCGATATGC	771
QY	661	TGGTGGGACCTCTTCATGAAGATCTGCGTCTTCACTTTCGCTTCGTGATCCCTGTCTC	720
Db	772	TACTGGGACACATTGATGAAGATCTGCGTCTTCATCTTTGGCTTCGTGGCTCCTCTCTC	831
QY	721	ATCATCATCGTCTGCTTACACCCCTGATGATCTCGGCTCTCAAGAGCGTCCGGTCCCTTCT	780
Db	832	ATCATCACCGTTTGCTCACTCTCATGGTCTCGGCTCTCAAGAGCGTTCGCTGCTTCA	891
QY	781	GGTCCCGAGAGAAAGATCGCAACTCGTAGGATCAACAGACTGGTCTCGTGTGGTGG	840
Db	892	GTTTACGCTGAAGAAAGATCGCAACTGAGACGATCACTCGATTCGTTCTGGTTCGTGG	951
QY	841	CGAGTCTTCGTCGTCTGCTGGACTCCCATTCACATATTCATCTCTGTGGAGGCTCT--G	897
Db	952	CGAGTGTCTGTTGTGTGGACCCCATTCATCTTCATCTCTGTCTCAAGCTCTTCT	1011
QY	898	GGGAGACCTCCACAGCACAGCTCTCTCTCCAGCTATTACTCTGCATCGCTTAGGC	957
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Db	1072	TACACCAACAGAGCGCTGAACCCCATCTGTACGCTTCTTGTATGAGAACTTCAAGCGC	1131
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Db	1132	TGCTTTAGGACTTCTGCTGCCAGCTCGGACTGCAGCGAGCGGCTGTAGTCGG	1191
QY	1078	GTCCGAATACAGTTCAGATCTCTGCTTACC	1108
Db	1192	GTCAAGACACTCTCCGAGACACAGTGCC	1222

RESULT 37

AF132813

LOCUS

DEFINITION

ACCESSION

VERSION

KEYWORDS

SOURCE

ORGANISM

AF132813

Danio rerio mu opioid receptor like OR2 (or2) mRNA

linear

VRT 05-FEB-2001

complete cds.

AF132813.1

GI:12658907

Danio rerio (zebrafish)

Danio rerio

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Actinopterygii; Neopterygii; Teleostei; Ostariophysi; Cypriniformes; Cyprinidae; Danio.

1 (bases 1 to 1387)

Barralio,A., Gonzalez-Sarmiento,R., Alvar,F. and Rodriguez,R.E. ZFOR2, a new opioid receptor-like gene from the teleost zebrafish (Danio rerio)

Brain Res. Mol. Brain Res. 84 (1-2), 1-6 (2000)

20565716

11113526

2 (bases 1 to 1387)

Rodriguez,R.E., Gonzalez-Sarmiento,R., Barralio,A. and Alvar,F. Direct Submission

Submitted (03-MAR-1999) Biochemistry and Molecular Biology, University of Salamanca, Campus Unamuno, Salamanca 37007, Spain

Location/Qualifiers

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/gene="or2"

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/protein_id="AAK01143.1"

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gene

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1PHEWKNLKDTCFPAFNMVLI,1VCMVGLKGVNLVAVIRVEMTATNVIYF
RVLVVAVVFCWIE,1HVI,1LQV,1KALVT,1PNSLQTLTWHP,1CALGTN,1PVLVY
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Qy	265	AAGATGAAGACAGCAACCAATTTACATATTTAACTGGCTTTGGCAGATGTTTAGTT	324	
Db	291	AAAATGAAACTGCGACCAACATCTACATCTTCAACCTGCTCTAGCAGATTCCTTGGCG	350	
Qy	325	ACTACACCAATGCCCTTTTCAGGTACCGTCTACTTGATGAATTCCTGGCCCTTTGGGGAT	384	
Db	351	ACAAGTACTCTACCTTTTCAGAGTGTGAATTAAGTGAAGGTCATGGCCCTTTTGGAGAC	410	
Qy	385	GTGCTGTGCAAGATAGTAATTTCAATTGATTACTACAACATGTTTCAACGATCTTCCACC	444	
Db	411	GAGCTGTGCAAGATTGTGATGTCTATTGATTACTACAACATGTTTCAACGATCTTCTTACT	470	
Qy	445	TTGACCATGATGAGCTGGGACCGCTACATTTGCCGTGTGCCACCCGCGAAGGCTTTGGAC	504	
Db	471	CTCACAACCAATGAGTGTGACCGTTACATCGCTGTTTGCCACCCGGTTAAGCCTTTGGAC	530	
Qy	505	TTCCGCACACCCTTGAAGGCAAAAGATCATCAATATCTGCATCTGGCTGTCTCGTCACT	564	
Db	531	TTCAGAACGCCCGAAATGCAAGATCGTCAACGTGTGTAACTTGGATCCCTTTCATCTGCA	590	
Qy	565	GTGGGATCTCTGCAATAGTCTCTTGGAGGACCAAGTCAAGGAGAGCTGCGATGTCACT	624	
Db	591	ATCGGTCTCCCTGTCATGGTGTATGGCTCACCACCACTTCTGATCTGCACTCGAATGGCATC	650	
Qy	625	GAGTGCCTCTTGCAAGTCCCAGATGATGATCTCTCTGGTGGGACCTCTTTCATGAAGATC	684	
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Qy	685	TGGTCTTCACTTTTGGCTTGTGATCCCTGTCTCTCATCATCATCTGCTGTACACCCGT	744	
Db	711	TGGTCTTTCATCTTTTGGCTTTCATCATGCCGCTCTCATCATCACCGTCTGCTACGGCTG	770	
Qy	745	ATGATCTCGTCTCAAGAGCGTCCGGCTCTCTTTCTGGCTCCCGAGAGAAAGATCGCAAC	804	
Db	771	ATGATCTCCGCTGAAGAGCGTGCATGCTCTCTGGCTCAAGAGAGAGGACCGCAAC	830	
Qy	805	CTCGTATAGGATCACAGACTGGTCTCGGTGTGTGTGGCAGTCTTTCGTCTGTGTGACT	864	
Db	831	CTCCGGGCGCATACCCGAAATGGTGTCTGGTGTGTGGCGGTTTTCATCGTTTGTGTGACG	890	
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Qy	925	CTCTCCAGCTAATTACTTCTGCATCGCCTTAGGCTATACCAACAGTAGCTGAATCCCAT	984	
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Qy	985	CTCTACGCCCTTCTTGTATGAAAACTTCAAGCGGTGTTTCCGGGACTTCTGCTTTCCACTG	1044	
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RESULT 38
AR148257 AR148257 2135 bp DNA linear PAT 08-AUG-2001

LOCUS
DEFINITION Sequence 1 from patent US 6225080.
ACCESSION AR148257
VERSION AR148257.1 GI:15112347
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.

REFERENCE
1 (bases 1 to 2135)
Uhl,G.R., Eppler,C.Mark. and Wang,J.-B.
TITLE Mu-subtype Opioid receptor
JOURNAL Patent: US 6225080-A 1 01-MAY-2001;
FEATURES Location/Qualifiers
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Query Match	38.8%;	Score 448;	DB 6;	Length 2135;
Best Local Similarity	67.0%;	Pred. No. 1.9e-72;		
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QY	590	GAGGCAACAAAGTCAGGGAAGATCGATGTCAATGAGTGTCTCTTGGCAGTTCACGATG	649	
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QY	650	ATGACTACTCTCGTGGGACCTTTTCATGAAGATCTGGCTCTTTCATCTTTGCCCTTCGTTGA	709	
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QY	710	TCCCTGTCTCATCATCATGTCTGTCTACACCTTGATGATCTCTGGTCTCAAGAGCGTCC	769	
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RESULT 39
RATMUOR1A 2135 bp mRNA linear ROD 21-OCT-1993
DEFINITION Rattus norvegicus Mu opiate receptor (MUOR1) mRNA, complete cds.
ACCESSION L20684
VERSION L20684.1 GI:409149
KEYWORDS Mu opiate receptor.
SOURCE Rattus norvegicus (Norway rat)
ORGANISM Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.
REFERENCE 1 (bases 1 to 2135)
AUTHORS Wang, J.B., Imai, Y., Eppler, C.M., Gregor, P., Spivak, C.E. and
Uhl, G.R.
mu opiate receptor: cDNA cloning and expression
Proc. Natl. Acad. Sci. U.S.A. 90 (21), 10230-10234 (1993)
8234282
COMMENT Original source text: Rattus norvegicus (library: lambda ZAP
(Stratagene)) cortex cDNA to mRNA.
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ETAPLP"

gene
CDS

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ORIGIN

Query Match

38.8%; Score 448; DB 10; Length 2135;

RESULT 40

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Best Local Similarity 67.0%; Pred. No. 1.9e-72;
Matches 669; Conservative 0; Mismatches 320; Indels 9; Gaps 2;
QY 110 ACAGCAACGCGACGCGCGCTCGAGGAGCGCGAGCTGGAGCCCGCACATCTCCCGG 169
Db 167 ACCGACCGGGCTTGGGGAGACGACGCTGTGCCCTCAGACCGGACCCCTCCATGG 226
QY 170 CAAATCCGGTCAATCAACGCGCTTACTCGGTAGTGTCTGCTGGGCTTGGTGGCA 229
Db 227 TCACGCCAATACCATCATGGGCCCTCTACTCTATCGTGTGTGTAGTGGGCTCTT 286
QY 230 ACTCGCTGGTCAATGTTCTGATCATCCGATACAAAGATGAAGACAGCAACCAATTT 289
Db 287 ACTTCTGGTCAATGTTGATGTTGAAGATACACCAATGAGACTGCCACCAATCT 346
QY 290 ACATATTTAACTGGCTTTGGCAGATGCTTTAGTTACTACAAACCATGCCCTTTCA 349
Db 347 ACATTTTCAACCTTGTCTGGCAGACGCTTAGCGACCACTACACTGCCCTTTCA 406
QY 350 CGGTCTACTTGATGATTTCTGSCCTTTTGGGATGCTGTGCAAGATAGTAATTTCA 409
Db 407 TCAACTACTGTATGGAAACATGCCCTTCGGAACCATCTCTGCAAGATCGTATCT 466
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QY 830 TGGTGGTGGTGCAGTCTTCGTCCTGCTGACCTCCCATTCACATATTCATCTCTGG 889
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Db 1058 TCAAGCGATGCTTCAGAGAGTCTCGATCCCAACCTCGTCCAGATCGAACAGCAAACT 1117
QY 1070 CTAGCAGAGTCCGAATACAGTTCAGGATTCCTGCTTAC 1107
Db 1118 CCACTCGAGTCCGTCAGAACACTAGGGAACATCCCTCC 1155

```


RATROB
LOCUS 2397 bp mRNA linear ROD 09-JAN-2003
DEFINITION Rattus norvegicus ROR-B mRNA for opioid receptor B, complete cds.
ACCESSION D16349
VERSION D16349.1 GI:391866
KEYWORDS G-protein coupled receptor.
SOURCE Rattus norvegicus (Norway rat)
ORGANISM Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.
REFERENCE 1 (bases 1 to 2397)
AUTHORS Fukuda, K., Kato, S., Mori, K., Nishi, M. and Takeshima, H.
TITLE Primary structures and expression from cDNAs of rat opioid receptor delta- and mu-subtypes
JOURNAL FEBS Lett. 327 (3), 311-314 (1993)
MEDLINE 93351652
PUBMED 8394245
REFERENCE 2 (bases 1 to 2397)
AUTHORS Takeshima, H.
TITLE Direct Submission
JOURNAL Submitted (03-JUN-1993) Hiroshi Takeshima, International Institute for Advanced Studies; c/o Shimadzu Corporation N-80, 1 Nishinokyo-Kuware-cho, Kyoto 604, Japan (Tel:81-75-823-1208, Fax:81-75-811-8186)
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ETAPLP"

Query Match 38.8%; Score 448; DB 10; Length 2397;
Best Local Similarity 67.0%; Pred. No. 1.9e-72;
Matches 669; Conservative 0; Mismatches 320; Indels 9; Gaps 2;
QY 110 ACAGAACCGACGCGCGCTCGGAGACGCGAGCTGGAGCCCGCGACATCTCCCGG 169
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DB 380 TCACAGCCATTACCATGCGCCCTCTACTCTATGCTGTGTGTGTGGCCCTTCGGAA 439
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DB 680 ACATTTGCTGTCTGCCACCCAGTCAAGCCCTGGAATTCGGTACCCCGCAATGCCAATA 739
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DB 800 CAACCAAAATACAGCAGGGGTC-----CATAGATTGCACCCCTCAGCTTCTCCACC 853
QY 650 ATGACTACTCTGCTGGGACCTCTTCATGAAGATCTGCGCTCTTTCATCTTTCCTTTCCTGA 709
DB 854 CAACCTGGTACTGGGAACCTGCTC--AAATCTGTGCTTTTATCTTCTGCTTTCATCA 910
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DB 1151 CTTTGGGTTACAGAACAGCTGCTGAATCCAGTTCTTTTACGCTTCTTGTGATGAAACT 1210
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QY 1070 CTAGCAGAGTCGGAATACAGTTTCAAGTTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1107
DB 1271 CCACTCGAGTCCGTCAGAACACTAGGGAACATCCCTCC 1308

RESULT 41
RATWOPIOD
LOCUS 1401 bp mRNA linear ROD 24-JAN-1994
DEFINITION Rat mu opioid receptor mRNA, complete cds.
ACCESSION L22455
VERSION L22455.1 GI:437671
KEYWORDS mu opioid receptor.
SOURCE Rattus norvegicus (Norway rat)
ORGANISM Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.
REFERENCE 1 (bases 1 to 1401)
AUTHORS Thompson, R.C., Mansour, A., Akil, H. and Watson, S.J.
TITLE Cloning and pharmacological characterization of a rat mu opioid receptor
JOURNAL Neuron 11 (5), 903-913 (1993)
MEDLINE 94059560
PUBMED 8240812
COMMENT Original source text: Rattus norvegicus (strain Sprague-Dawley) cDNA to mRNA.

FEATURES
source

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ETAPLP"

CDS

ORIGIN

Query Match 38.7%; Score 446.4; DB 10; Length 1401;
Best Local Similarity 66.9%; Pred. No. 3.7e-72;
Matches 568; Conservative 0; Mismatches 321; Indels 9; Gaps 2;

QY 110 ACAGCAACGGCAGCGCGCTCGAGAGACGGCGAGCTGGAGCCGCGCAGCATCTCCCGG 169
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DB 666 ACATTGCGTGTGACCCCGTGAAGCTTTGAGCTTCGACACACCTTGAAGCAAGA 725
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DB 726 TCGTCAACGTCTGCACTGGATCCTCTCTCTGCACTGCTGCTGCTGCTGCTGCTGCTG 785
QY 590 GAGGACCAAGTCAGGAGACATGATGATGATGATGATGATGATGATGATGATGATGATG 649
DB 786 CAACCAAAATACAGGACGGGTC-----CATAGATTGACCCCTCAGCTTCCACC 839
QY 650 ATGACTACTCTGCTGGGACCTCTTCATGAAGATCTCGCTTTCATCTTTGCGCTTGGTA 709
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QY 770 GGCTCCTTTCTGGTCCCGAGAGAAAGATCGCAACCTGCGTAGGATCAACAGACTGGTCC 829

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Db 1017 TGG 1076
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RESULT 42

RNU02083
LOCUS
DEFINITION
Rattus norvegicus mu-opioid receptor mRNA, linear ROD 20-JUL-1995
ACCESSION
U02083
VERSION
U02083.1 GI:403573
KEYWORDS
SOURCE
Rattus norvegicus (Norway rat)
ORGANISM
Rattus norvegicus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae;
Rattus.
REFERENCE
1 (bases 1 to 1448)
Bunzow J.R., Zhang, G., Bouvier, C., Saez, C., Ronnekleiv, O.K.,
Kelly, M.J., and Grandy, D.K. (1995)
Characterization and distribution of a cloned rat mu-opioid
receptor
J. Neurochem. 64 (1), 14-24 (1995)
PUBMED
7798908
REFERENCE
2 (bases 1 to 1448)
Bunzow, J.R.
Direct Submission
Submitted (24-SEP-1993) James R. Bunzow, VIABR, Oregon Health
Sciences University, 3181 S.W. Sam Jackson Park Rd., Portland, OR
97201 USA

FEATURES

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ORIGIN

Query Match 38.7%; Score 446.4; DB 10; Length 1448;
Best Local Similarity 66.9%; Pred. No. 3.7e-72;

Matches 668; Conservative 0; Mismatches 321; Indels 9; Gaps 2;

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RESULT 43
 RATHORA

LOCUS RATMORA 1586 bp mRNA linear ROD 04-AUG-1993
 DEFINITION Rattus norvegicus mu opioid receptor mRNA, complete cds.
 ACCESSION U00001
 VERSION 1.1
 KEYWORDS mu opioid receptor.
 SOURCE Rattus norvegicus (Norway rat)
 ORGANISM Rattus norvegicus
 Rattus.
 1 (bases 1 to 1586)
 Chen, Y., Mestek, A., Liu, J., Hurley, J. A. and Yu, L.
 Molecular cloning and functional expression of a mu-opioid receptor
 from rat brain
 Mol. Pharmacol. 44 (1), 8-12 (1993)
 93341493
 PUBMED 8393525
 COMMENT Original source text: Rattus norvegicus whole brain cDNA to mRNA.
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 ETAPLP"

CDS

Query Match 38.7%; Score 446.4; DB 10; Length 1586;
 Best Local Similarity 66.9%; Pred. No. 3.7e-72;
 Matches 668; Conservative 0; Mismatches 321; Indels 9; Gaps 2;

QY 110 ACAGCAAGCGGAGCGCGCTCGGAGGACGGGACGCTGGAGCGCGGACATCTCCCGG 169
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 Db 346 ACCGACCGGGCTGGCGGGAACGACAGCTGTGCGCTCAGACCGGAGCGCTTCCATGG 405
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 QY 170 CCATCCCGGTCAATCATCAGCGGGCTCTACTCGGTAGTGTTCGTGCGGGCTTGGTGGCA 229
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 QY 290 ACATATTTAACTGGCTTTGGCAGATGCTTTAGTTTACTACCAACCATGCGCTTTCCAGTA 349
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ORIGIN

Query Match 38.7%; Score 446.4; DB 10; Length 1586;
 Best Local Similarity 66.9%; Pred. No. 3.7e-72;
 Matches 668; Conservative 0; Mismatches 321; Indels 9; Gaps 2;

QY 110 ACAGCAAGCGGAGCGCGCTCGGAGGACGGGACGCTGGAGCGCGGACATCTCCCGG 169
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RESULT 44
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LOCUS
DEFINITION
Sequence 1 from patent US 6103492.
ACCESSION
ARI06013
VERSION
ARI06013.1
KEYWORDS
GI:12820078
SOURCE
Unknown.
ORGANISM
Unclassified.
1 (bases 1 to 1618)
Yu.L.
TITLE
Polynucleotide encoding mu opioid receptor
JOURNAL
Patent: US 6103492-A 1 15-AUG-2000;
FEATURES
Location/Qualifiers
1..1618
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Query Match	38.7%	Score 446.4	DB 6	Length 1618
Best Local Similarity	56.9%	Pred. No. 3.7e-72		
Matches 668	Conservative 0	Mismatches 321	Indels 9	Gaps 2
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410	TCACAGCCATTACCATCATGCGCCCTCTACTCTATCGTGTGTGTAGTGGGCTCTTCGGA	469		

230	ACTCGTCGTGCATGTTTCGTGATCATCCGATACACAAAGATGAAGACAGCAACCAATTT	289
470	ACTTCTCGTCATGTATGTGATTGTAAGATACACAAAATGAAGACTGCCACCAATCT	529
290	ACATATTAAACCTGGCTTTGGCAGATGCTTTAGTTACTACAACCATGCCCTTTCAGAGTA	349
530	ACATTTTCAACCTTGCTCGGCAGACGCTTAGCGACCAAGTACACTGCCCTTTCAGAGTG	589
350	CGGCTTACTTGATGAATTCCTGGCCCTTTTGGGGATGTGCTGTGCAAGATAGTAATTTCCA	409
590	TCAACTACCTGATGGGAAATGBCCTTCGGAAACCATCTCTGCAAGATCGTGAATCTCAA	649
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470	ACATTGCCGTGTGCCACCCCGCTGAAGGCTTTGGAGCTTCGCGACACCCCTTGAAGGCAAGA	529
710	ACATTGCTGTCTGCCACCCAGTCAAGCCCTGGATTTCGTAACCCCGAAATGCCAATA	769
530	TCATCAATATCTGCATCTGGCTGTGTCGTCTCATCTGTTGGCAATCTTGCATAGTCCCTTG	589
770	TGCTCAACGCTCTGCAACTGGATCTCTCTCTGCCATCGGTCTGCTGTAATGTTTCATGG	829
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830	CAACACAAATATACAGCAGGGGTC-----CATGATTGCACCTCAGTTCTCCACC	883
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ACCESSION	AR106014				
VERSION	AR106014.1	GI:12820079			
KEYWORDS	Unknown.				
SOURCE	Unknown.				
ORGANISM	Unclassified.				
REFERENCE	1 (bases 1 to 1618)				
AUTHORS	Yu, L.				

RESULT 45					
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LOCUS	ARI06014			DNA	linear
DEFINITION	Sequence 3	from patent US 6103492.	1618 bp		
ACCESSION	ARI06014				
VERSION	ARI06014.1	GI:12820079			
KEYWORDS	.				
SOURCE	Unknown.				
ORGANISM	Unknown.				
REFERENCE	Unclassified.				
AUTHORS	1 (bases 1 to 1618)				
	Yu.L.				

TITLE Polynucleotide encoding mu opioid receptor
JOURNAL Patent: US 6103492-A 3 15-AUG-2000;
FEATURES Location/Qualifiers
source 1..1618
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ORIGIN

Query Match 38.7%; Score 446.4; DB 6; Length 1618;
Best Local Similarity 66.9%; Pred. No. 3.7e-72;
Matches 668; Conservative 0; Mismatches 321; Indels 9; Gaps 2;
QY 110 ACAGCAAGCGGAGCGCGGCTCGAGGAGCGGCGAGCTGGAGCGCGGCGACATCTCCCGG 169
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DEFINITION Sequence 1 from patent US 6235496.
ACCESSION ARI53354
VERSION ARI53354.1 GI:15120886
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 1618)
AUTHORS Yu, L.
TITLE Nucleic acid encoding mammalian mu opioid receptor
JOURNAL Patent: US 6235496-A 1 22-MAY-2001;
FEATURES Location/Qualifiers
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Best Local Similarity 66.9%; Pred. No. 3.7e-72;
Matches 668; Conservative 0; Mismatches 321; Indels 9; Gaps 2;
QY 110 ACAGCAAGCGGAGCGCGGCTCGAGGAGCGGCGAGCTGGAGCGCGGCGACATCTCCCGG 169
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Eppendorf, Institut fuer Zellbiochemie & klinische Neurobiologie,
 Martinstr. 52, 20246 Hamburg, FRG
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SOURCE	Unknown.																																								
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AUTHORS	Yu,L.																																								
TITLE	Polynucleotide encoding mu opioid receptor																																								
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RESULT 58
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 ACCESSION AR270816
 VERSION AR270816.1 GI:29702050
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unclassified.
 REFERENCE 1 (bases 1 to 2162)
 AUTHORS Au-Young, J. and Seilhamer, J. J.
 TITLE Composition for the detection of signaling pathway gene expression
 JOURNAL Patent: US 6500938-A 1379 31-DEC-2002;
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ORIGIN

Query Match 37.7%; Score 434.8; DB 6; Length 2162;
 Best Local Similarity 66.3%; Pred. No. 5e-70;
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 DEFINITION Sequence 7 from patent US 6538120.
 ACCESSION AR301230
 VERSION AR301230.1 GI:31689001
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unclassified.
 REFERENCE 1 (bases 1 to 2162)
 AUTHORS Hoehe, M. and Wendel, B.
 TITLE Genomic sequence of the human .mu.-opioid receptor gene and the variants, polymorphisms and mutations thereof
 JOURNAL Patent: US 6538120-A 7 25-MAR-2003;
 FEATURES Location/Qualifiers


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Best Local Similarity 66.3%; Pred. No. 5e-70; Indels 9; Gaps 2;
Matches 660; Conservative 0; Mismatches 327; Indels 9; Gaps 2;

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DEFINITION Sequence 185 from Patent WO02061087.
ACCESSION AX548900
VERSION AX548900.1 GI:25813759
KEYWORDS Homo sapiens (human)
SOURCE Homo sapiens
ORGANISM Homo sapiens
REFERENCE 1
AUTHORS Burmer,G.C., Roush,C.L. and Brown,J.P.
TITLE Antigenic peptides, such as for G protein-coupled receptors (GPCRs), antibodies thereto, and systems for identifying such antigenic peptides
JOURNAL Patent: WO 02061087-A 185 08-AUG-2002; Lifespan Biosciences, Inc. (US)
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Best Local Similarity 66.3%; Pred. No. 5e-70; Indels 9; Gaps 2;
Matches 660; Conservative 0; Mismatches 327; Indels 9; Gaps 2;

QY 92 CCGGCTGGCGGAGCCGACAGCAACGCGCGCTCGGAGGAGCGGACGCTGGAGC 151
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QY 812 GGATCACAGATGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 871
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HUMMORIX

LOCUS Human mu opiate receptor (MOR1) mRNA, complete cds. PRI 08-AUG-1994

DEFINITION

L25119

VERSION

L25119.1 GI:452072

KEYWORDS

Mu opiate receptor.

SOURCE

Homo sapiens (human)

ORGANISM

Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;

Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.

Wang, J.B., Johnson, P.S., Persico, A.M., Hawkins, A.L., Griffin, C.A.

and Uhl, G.R.

Human mu opiate receptor. cDNA and genomic clones, pharmacologic

characterization and chromosomal assignment

FEBB Lett. 338 (2), 217-222 (1994)

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7905839

Original

source text: Homo sapiens cDNA to mRNA.

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Query Match 37.7%; Score 434.8; DB 9; Length 2162;
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 Matches 660; Conservative 0; Mismatches 327; Indels 9; Gaps 2;
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 ACCESSION U00475
 VERSION U00475.1 GI:403488
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 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Rattus.

REFERENCE 1 (bases 1 to 1366)
 Abood,M.E.
 TITLE Molecular cloning and expression of a rat delta opioid receptor from rat brain
 JOURNAL J. Neurosci. Res. 27, 714-719 (1994)
 REFERENCE 2 (bases 1 to 1366)
 Abood,M.E.
 TITLE Direct Submission
 SUBMITTED (09-AUG-1993) Mary E. Abood, Pharmacology and Toxicology, Medical College of Virginia/Virginia Commonwealth University, 1112 E. Clay St., Richmond, VA 23298, USA
 JOURNAL Location/Qualifiers

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 ACCESSION D16348
 VERSION D16348.1 GI:391864
 KEYWORDS G-protein coupled receptor.
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 ORGANISM Rattus norvegicus
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 cds, alternatively spliced.
 ACCESSION AF346813
 VERSION AF346813.1 GI:27448124
 KEYWORDS
 SOURCE Mus musculus (house mouse)
 ORGANISM Mus musculus
 Mammalia; Eutheria; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 Pan.Y.-X., Xu.J. and Pasternak,G.
 1 (bases 1 to 1332)
 Identification and characterization of four splice variants of mouse mu opioid receptor gene
 Unpublished
 2 (bases 1 to 1332)
 Pan.Y.-X., Xu.J. and Pasternak,G.
 Direct Submission
 Submitted (08-FEB-2001) Neurology, Memorial Sloan-Kettering Cancer Center, 1275 York Ave, New York, NY 10021, USA
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Best Local Similarity 65.8%; Pred. No. 1.4e-69;
Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;
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DEFINITION Sequence 3 from patent US 650927.
ACCESSION AR269386
VERSION AR269386.1 GI:29700547
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE Unclassified.
1 (bases 1 to 1334)
AUTHORS Pasternak, G. and Pan, Y.-X.
TITLE Identification and characterization of multiple splice variants of
the mu-opioid receptor gene
JOURNAL Patent: US 650927-A 3 31-DEC-2002;
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Best Local Similarity 65.8%; Pred. No. 1.4e-69;
Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;
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VERSION AF167566.1 GI:18026692
KEYWORDS Mus musculus (house mouse)
SOURCE Mus musculus
ORGANISM Mus musculus
REFERENCE 1 (bases 1 to 1346)
AUTHORS Pan, Y.-X., Xu, J., Chang, A., Mahurter, L., and Pasternak, G.W.
TITLE Identification and characterization of a mu-opioid receptor splice variant (MOR-1BI)
JOURNAL Unpublished
REFERENCE 2 (bases 1 to 1346)
AUTHORS Pan, Y.-X., Xu, J., Chang, A., and Pasternak, G.W.
TITLE Direct Submission
JOURNAL Submitted (12-JUL-1999) Neurology, Memorial Sloan-Kettering Cancer Center, 1275 York Ave., New York, NY 10021, USA
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DEFINITION Sequence 11 from patent US 6500927.
ACCESSION AR269394
VERSION AR269394.1 GI:29700555
KEYWORDS
SOURCE Unknown.
ORGANISM Unclassified.
REFERENCE 1 (bases 1 to 1365)
AUTHORS Pasternak, G. and Pan, Y.-X.
TITLE Identification and characterization of multiple splice variants of the mu-opioid receptor gene
JOURNAL Patent: US 6500927-A 11 31-DEC-2002;
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305	TAGTGGCCCTCTTTGGAAACTTCTCTGGTCAATGATGTGATTGTAAGATATACCAAAATGA	364
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896	GGATCACCCGATGGTGTGCTGGTGGTGTGTTATTATTGTCTGTGGACCCCAATCC	955
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956	ACATCTATGTTCATCAAGAAGCACTGATCAAGATTCCAGAAACACATTTCCAGACTGTTT	1015
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RESULT 72

ACCESSION AY160190
VERSION AY160190.1 GI:37724702
KEYWORDS
SOURCE Mus musculus (house mouse)

ORGANISM	Mus musculus Mus musculus Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (bases 1 to 1373) XU, B. and PASTERNAK, G.W. IDENTIFICATION AND CHARACTERIZATION OF A NEW ISOFORM FROM MOUSE MU OPIOD RECEPTOR GENE OPRM
REFERENCE	
AUTHORS	
TITLE	

Unpublished
2 (bases 1 to 1373)
Xu, J. and Pasternak, G.W.
Direct Submission
Submitted (07-Oct-2002) Neurology, Memorial Sloan-Kettering Cancer
Center, 1275 York Ave., New York, NY 10021, USA

FEATURES	Location/Qualifiers
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LOCUS AF260306 1440 bp mRNA linear ROD 22-NOV-2001
DEFINITION Mus musculus mu opioid receptor isoform MOR-1Ha mRNA, complete cds,
alternatively spliced.
ACCESSION AF260306
VERSION AF260306.1 GI:17046162
KEYWORDS
SOURCE Mus musculus (house mouse)
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Mammalia; Eutheria; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE 1 (bases 1 to 1440)
Pan, Y. X., Xu, J., Mahurter, L., Bolan, E., Xu, M. and Pasternak, G. W.
Generation of the mu opioid receptor (MOR-1) protein by three new
splice variants of the Oprm gene
Proc. Natl. Acad. Sci. U.S.A. 98 (24), 14084-14089 (2001)
JOURNAL 21574637
MEDLINE 11717463
PUBMED 11717463
REFERENCE 2 (bases 1 to 1440)
Pan, Y. X., Xu, J., Rossi, G., Xu, M., Mahurter, L., Bolan, E. and
Pasternak, G. W.
Direct Submission
Submitted (25-APR-2000) Neurology, Memorial Sloan-Kettering Cancer
Center, 1275 York Ave, New York, NY 10021, USA
JOURNAL Location/Qualifiers
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 VERSION AF400246.1 GI:17046392
 KEYWORDS Mus musculus (house mouse)
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 ORGANISM Mus musculus
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Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 1 (bases 1 to 1440)
 Pan, Y.-X., Xu, J., Mahurter, L., Bolan, E., Xu, M. and Pasternak, G.W.
 Generation of the mu opioid receptor (MOR-1) protein by three new
 splice variants of the Opm gene
 Proc. Natl. Acad. Sci. U.S.A. 98 (24), 14084-14089 (2001)
 21574637
 MEDLINE
 PUBMED
 11717463
 REFERENCE
 2 (bases 1 to 1440)
 Pan, Y.-X., Xu, J., Rossi, G., Xu, M., Mahurter, L., Bolan, E. and
 Pasternak, G.W.
 Direct Submission
 Submitted (17-JUL-2001) Neurology, Memorial Sloan-Kettering Cancer
 Center, 1275 York Ave, New York, NY 10021, USA
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Query Match 37.5%; Score 432.4; DB 10; Length 1440;
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DEFINITION Mus musculus mu opioid receptor 1 mRNA, complete cds, alternatively spliced.
ACCESSION AF400248
VERSION AF400248.1 GI:17046396
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SOURCE Mus musculus (house mouse)
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Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
REFERENCE 1 (bases 1 to 1569)
AUTHORS Pan, Y.X., Xu, J., Mahurter, L., Bolan, E., Xu, M. and Pasternak, G.W.
TITLE Generation of the mu opioid receptor (MOR-1) protein by three new splice variants of the Oprm gene

RESULT 79
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VERSION AF260308.1 GI:17046166
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REFERENCE 1 (bases 1 to 1569)
AUTHORS Pan, Y.X., Xu, J., Mahurter, L., Bolan, E., Xu, M. and Pasternak, G.W.
TITLE Generation of the mu opioid receptor (MOR-1) protein by three new splice variants of the Oprm gene
JOURNAL Proc. Natl. Acad. Sci. U.S.A. 98 (24), 14084-14089 (2001)
MEDLINE 21574637
PUBMED 11717463
REFERENCE 2 (bases 1 to 1569)
AUTHORS Pan, Y.-X., Xu, J., Rossi, G., Xu, M., Mahurter, L., Bolan, E. and Pasternak, G.W.
TITLE Direct Submission
JOURNAL Submitted (25-APR-2000) Neurology, Memorial Sloan-Kettering Cancer Center, 1275 York Ave, New York, NY 10021, USA
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Best Local Similarity 65.8%; Pred. No. 1.4e-69;
Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;
QY 92 CCGGCTGGGCGGAGCCGACAGCAACGCGCGCTCGGAGGACGCGAGCTGGAGC 151
DB 477 CCGACCCATCGGTCTTACCGACGCGGCTTGGCGGAGCCACAGCCTGTGCCCTCAGA 536
QY 152 CCGCGCACATCTCCCGGCGATCCCGGTATATATACGCGGCTTACTCCGTAGTGTTCG 211
DB 537 CCGGCGACCTTCCATGTTGTCACAGCCATCACCATCATGCGCCCTTATTTATCTGTTGTG 596
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JOURNAL Proc. Natl. Acad. Sci. U.S.A. 98 (24), 14084-14089 (2001)
 MEDLINE 21574637
 PUBMED 11717463
 REFERENCE 2 (bases 1 to 1569)
 AUTHORS Pan, Y.-X., Xu, J., Rossi, G., Xu, M., Mahurter, L., Bolan, E. and Pasternak, G. W.
 TITLE Direct Submission
 JOURNAL Submitted (17-JUL-2001) Neurology, Memorial Sloan-Kettering Cancer Center, 1275 York Ave, New York, NY 10021, USA
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 Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;
 QY 92 CCGCTGGCCGAGCCGACAGCAACGCGACGCGGCTCGAGAGCGCGCAGCTGGAGC 151
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 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE 1 (bases 1 to 1610)
 PASTERNAK, G. and PAN, Y.-X.
 IDENTIFICATION AND CHARACTERIZATION OF MULTIPLE SPLICED VARIANTS OF
 THE MU-OPIOD RECEPTOR GENE
 JOURNAL Patent: US 6500927-A 16 31-DEC-2002;
 FEATURES
 Location/Qualifiers
 1..1610
 /organism="unknown"
 /mol_type="genomic DNA"

ORIGIN
 Query Match 37.5%; Score 432.4; DB 6; Length 1610;
 Best Local Similarity 65.8%; Pred. No. 1.4e-69;
 Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;
 QY 92 CCGCTGGCCGAGCCGACAGCAACGCGACGCGGCTCGAGAGCGCGCAGCTGGAGC 151
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 QY 152 CCGGCACATCTCCCGGCACTCCGCTCATCATCACGGCGGTCTACTCGTAGTGTTCG 211
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Db 401 CCGACCCATCGCGTCTTAACCGCACCGGGCTTGGGGGAGCCACAGCCTGTGCCCTCAGA 460
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RESULT 82
MMU26915
LOCUS
DEFINITION
U26915
ACCESSION
VERSION

MMU26915 1610 bp mRNA linear ROD 09-NOV-1995
Mus musculus mu opiod receptor (MOR-1) mRNA, complete cds.

KEYWORDS
SOURCE
ORGANISM

Mus musculus (house mouse)

Mus musculus

Eukaryota; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

1 (bases 1 to 1610)

Rossi,G.C., Pan,Y.X., Brown,G.P. and Pasternak,G.W.

Antisense mapping the MOR-1 opiod receptor: evidence for
alternative splicing and a novel morphine-6 beta-glucuronide
receptor

FEBS Lett. 369 (2-3), 192-196 (1995)

95377399

7649256

2 (bases 1 to 1610)

Pat,Y.-X.

Direct Submission

Submitted (11-MAY-1995) Ying-Xian Pan, Neurology, Memorial

Sloan-Kettering Cancer Center, 1275 York Ave., New York, NY 10021,

USA

Location/Qualifiers

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/tissue_type="brain"

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ETAPLP"

ORIGIN

Query Match 37.5%; Score 432.4; DB 10; Length 1610;

Best Local Similarity 65.8%; Pred. No. 1.4e-69;

Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;

Qy 92 CCGCTGGCGGAGCCCGACAGCAACCGGACGCGCGCTCGGAGGAGCGCAGCTGGAGC 151

Db 401 CCGACCCATCGGTCTTAACCGCACCGGGCTTGGGGGAGCCACAGCCTGTGCCCTCAGA 460

Qy 152 CCGCGCACATCTCCCGGCCATCCCGGTCTATCATCGCGGCTTACTCCGTAGTGTTCG 211

Db 461 CCGGACCGCTTCCATGGTTCACAGCATCACCATCATGGCCCTCTATTCTATCGTGTG 520

Qy 212 TCGTGGGCTTGTGGGCAACTCGCTGCTCATGTTCGTGATCATCCGATACACAAAGATGA 271

Db 521 TAGTGGGCTCTTTTGGAAACTTCTCTGCTCATGTATGATGTTGAAGATATACCAAAATGA 580

Qy 272 AGACAGCAACCAACATTTACATTTAACTGGCTTTGGCAGATGCTTTAGTTACTACAA 331

Db 581 AGATGCCACCAACATCTACATTTTCAACCTTGTCTGCGAGATGCTTACCCACTAGCA 640

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Db 701 GCAAGATCGTATCTCAATAGACTACTACAACTGTTTCCACAGTATCTTCCACCTCTGCA 760

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RESULT 85

AY036621 1695 bp mRNA linear ROD 31-DEC-2002
 LOCUS Mus musculus mu opioid receptor variant MOR-1R (Oprm) mRNA,
 DEFINITION complete cds, alternatively spliced.

ACCESSION AY036621

VERSION AY036621.1 GI:27446643

KEYWORDS Mus musculus (house mouse)

SOURCE Mus musculus

ORGANISM Mus musculus

REFERENCE 1 (bases 1 to 1695)
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.

AUTHORS Pan, J., Xu, J., Xu, M., and Pasternak, G.W.

TITLE Identification and characterization of a novel splice variant from mouse mu opioid receptor gene (Oprm)

JOURNAL Unpublished

REFERENCE 2 (bases 1 to 1695)

AUTHORS Pan, Y., Xu, J., Xu, M., and Pasternak, G.W.

TITLE Direct Submission

JOURNAL Submitted (26-MAY-2001) Neurology, Memorial Sloan-Kettering Cancer

Center, 1275 York Ave, New York, NY 10021, USA

FEATURES

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/organism="Mus musculus"

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67. .1437

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GPSYPS"

ORIGIN

Query Match 37.5%; Score 432.4; DB 10; Length 1695;
 Best Local Similarity 65.8%; Pred. No. 1.4e-69;
 Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;
 QY 92 CCGGCTGGGCGGAGCGGAGACAGCGAGCGGCGGCTGGAGGAGCGGAGCTGGAGC 151
 Db 185 CCGACCCATGCGGTCTTAACCGCACCGGGCTGGCGGAGCGCACGCTGTGCCCTCAGA 244
 QY 152 CCGGCGCATCTCCCGGCCATCCGGTGCATCATCAGCGGGGTCTACTCCGTAGTGTTCG 211
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RESULT 86

AR269392

LOCUS

DEFINITION

SEQUENCE 9 from patent US 6500927.

AR269392

VERSION

AR269392.1 GI:29700553

KEYWORDS

SOURCE

ORGANISM

Unclassified.

REFERENCE

1 (bases 1 to 1729)

AUTHORS

Pasternak, G. and Pan, Y.-X.

TITLE

Identification and characterization of multiple splice variants of

the mu-opioid receptor gene
Patent: US 650927-A 9 31-DEC-2002;
Location/Qualifiers
1..1729
/organism="unknown"
/mol_type="genomic DNA"

ORIGIN

Query Match 37.5%; Score 432.4; DB 6; Length 1729;
Best Local Similarity 65.8%; Pred. No. 1.4e-69;
Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;

QY 92 CGGCTGGCCGAGCCGACAGCAACGCGCGCGCTCGGAGGACGCGAGCTGGAGC 151
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QY 212 TCGTGGCTTGTGGGCACTCGCTGGTCATGCTGTCATCATCGATACCAAGATGA 271
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QY 332 CAATGCCCTTTGAGTACGCTCTACTGATGAATCTCGGCTTTGGGATGCTGT 391
DB 425 CGCTGCCCTTTGAGTGTAACTACCTGATGGAACTGGGCTTTGGAAATCATCCCT 484

QY 392 GCAAGATAGTAATTTCCATTTGATTTACTACAAATGTTTACCAAGCATCTTCACTTGACCA 451
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QY 452 TGATGAGCTGGACCCCTACATGCGGTGTCACCCCGTGAAGGTTTGGATCTCGCA 511
DB 545 CCATGAGTGTAGACCCCTACATGCGGTGTCACCCCGTGAAGGCTTGGATCTCGCA 604

QY 512 CACCTTTGAGGCAAGATCATCAATCTGATCTGGCTGTGCTGCTCATCTGTTGCA 571
DB 605 CCCCCGAAATGCCAAATTTGCAATGCTGCAATCTGCAATCTGCTCTCTGCTGCTGCT 664

QY 572 TCTCTGCAATAGTCTTGGAGGACCAAAAGTACAGGAAGACGTCGATGTCATGAGTGT 631
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DB 1136 CAATCGAACGCAAACTCTGCTCGAATCGTCAAAACACTAGGGAAC 1183

RESULT 87

AF167568
LOCUS Mus musculus mu opioid receptor variant F mRNA linear ROD 28-JUN-2000
DEFINITION Mus musculus mu opioid receptor variant F mRNA, complete cds.
ACCESSION AF167568
VERSION AF167568.1 GI:8778197

KEYWORDS

Mus musculus (house mouse)

ORGANISM

Mus musculus
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
1 (bases 1 to 1729)
Pan, Y. X., Xu, J., Bolan, E., Chang, A., Mahurter, L., Rossi, G. and
Pasternak, G.W.

REFERENCE

Isolation and expression of a novel alternatively spliced mu opioid
receptor isoform, MOR-1F
FEBS Lett. 466 (2-3), 337-340 (2000)
20145060
PUBMED 10682855

REFERENCE

2 (bases 1 to 1729)
Pan, Y. X., Xu, J., Chang, A., Mahurter, L. and Pasternak, G.W.
Direct Submission
Submitted (13-JUN-2000) Neurology, Memorial Sloan-Kettering Cancer
Center, 1275 York Ave., New York, NY 10021, USA

FEATURES

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ORIGIN

Query Match 37.5%; Score 432.4; DB 10; Length 1729;
Best Local Similarity 65.8%; Pred. No. 1.4e-69;
Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;

QY 92 CGGCTGGCCGAGCCGACAGCAACGCGCGCGCTCGGAGGACGCGAGCTGGAGC 151
DB 185 CGACCCATCGCGTCTTAACTGCGGCTGGCGGAGCCACAGCCTGTCCTCAGA 244

QY 152 CGCGCACATCTCCCGGCCATCCCGGTCATCATCAGCGCGCTCTACTCCGAGTGTTCG 211
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 QY 332 CATTGCCCTTTCAGTAGCTGCTTACTGATGAATTCCTGGCTTTGGGGATGCTGCT 391
 Db 425 CGTGGCTTTTCAGAGTGTAACTTCTGATGGGAACGTTGGCTTTGGGAACATCTCT 484
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RESULT 88
 LOCUS AR269393 2045 bp DNA linear PAT 10-APR-2003
 DEFINITION Sequence 10 from patent US 6500927.
 ACCESSION AR269393
 VERSION AR269393.1 GI:29700554
 KEYWORDS
 SOURCE Unknown.
 ORGANISM Unknown.
 REFERENCE 1 (bases 1 to 2045)
 AUTHORS Pasternak, G. and Pan, Y.-X.
 TITLE Identification and characterization of multiple splice variants of the mu-opioid receptor gene
 JOURNAL Patent: US 6500927-A 10 31-DEC-2002;
 FEATURES Location/Qualifiers

source 1..2045
 /organism="unknown"
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 ORIGIN
 Query Match 37.5%; Score 432.4; DB 6; Length 2045;
 Best Local Similarity 65.8%; Pred. No. 1.4e-59;
 Matches 663; Conservative 0; Mismatches 336; Indels 9; Gaps 2;
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ACCESSION	AF167567		
VERSION	AF167567.1	GI:18026694	
KEYWORDS			
SOURCE	Mus musculus (house mouse)		
ORGANISM	Mus musculus		
REFERENCE	1. (bases 1 to 2045)		
AUTHORS	Pan Y.-X., Xu J., Chang A. and Pasternak G.W.		
TITLE	Identification and characterization of a novel mu opioid receptor splice variant (MOR-1BII)		
JOURNAL	Unpublished		
REFERENCE	2. (bases 1 to 2045)		
AUTHORS	Pan Y.-X., Xu J., Chang A. and Pasternak G.W.		
TITLE	Direct Submission		
JOURNAL	Submitted (12-JUL-1999) Neurology, Memorial Sloan-Kettering Cancer Center, 1275 York Ave., New York, NY 10021, USA		
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Saitama 351-0198, Japan (E-mail:ikedak@postman.riken.go.jp,
Tel:81-48-462-1111(ex.6436), Fax:81-48-467-9645)

FEATURES

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Query Match 37.5%; Score 432.4; DB 10; Length 2137;
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LOCUS AX280923 1182 bp DNA linear PAT 02-NOV-2001
DEFINITION Sequence 546 from Patent WO0177172.
ACCESSION AX280923
VERSION AX280923.1 GI:16608217
KEYWORDS
SOURCE Homo sapiens (human)
ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Lehmann-Bruinema,K., Liaw,C.W. and Lin,I.-L.
TITLE Non-endogenous, constitutively activated known g protein-coupled
JOURNAL Patent: WO 0177172-A 546 18-OCT-2001;
Arena Pharmaceuticals, Inc. (US)
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Matches 658; Conservative 0; Mismatches 329; Indels 9; Gaps 2;
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RESULT 92
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LOCUS
DEFINITION Sequence 544 from Patent WO0177172.
ACCESSION AX280921
VERSION AX280921.1 GI:16608216
KEYWORDS
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ORGANISM Homo sapiens
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
Mammalia; Eutheria; Primates; Catarrhini; Hominidae; Homo.
REFERENCE 1
AUTHORS Lehmann-Bruinsma, K., Liaw, C.W. and Lin, I.L.
TITLE Non-endogenous, constitutively activated known g protein-coupled
receptors
JOURNAL Patent: WO 0177172-A 544 18-OCT-2001;
Arena Pharmaceuticals, Inc. (US)
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ORIGIN

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Best Local Similarity 66.1%; Pred. No. 1.9e-69;
Matches 658; Conservative 0; Mismatches 329; Indels 9; Gaps 2;

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VERSION	AY038989.1	GI:14718771	
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JOURNAL	Cercopitheciidae; Macaca.		
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AUTHORS	1. (bases 1 to 1399)		
TITLE	Miller, G.M. and Madras, B.K.		
JOURNAL	Cloning of the Macaca fascicularis mu opioid receptor		
REFERENCE	Unpublished		
AUTHORS	2. (bases 1 to 1399)		
TITLE	Miller, G.M. and Madras, B.K.		
JOURNAL	Direct Submission		
REFERENCE	Submitted (07-JUN-2001) Neurochemistry, New England Primate		
AUTHORS	Research Center, Harvard Medical School, One Pine Hill Drive,		
TITLE	Southborough, MA 01772, USA		
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Query Match	37.4%;	Score 431.6;	DB 9; Length 1399;
Best Local Similarity	66.1%;	Pred. No. 1.9e-69;	
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DB	684	TTCTGTGATGTTTCATGGCTACCAAAATATACAGGCAAGG-----TTCCATCGATTGA	737
QY	632	CCTTGCAAGTCCAGATGATGATCTCTCTGGTGGGACCTCTTCATGAAGATCTGGCTCT	691
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QY	692	TCATCTTTGCTTCGTGATCCCTGCTCTCATCATCATCTGCTCTGCTACACCTGATCATCC	751
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QY	812	GGATCACAGACTGGTCTCTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT	871
DB	915	GGATCACAGACTGGTCTCTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT	974
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DB	975	ACATTTACGTATCAATTAAGGCTTAGTTACATCCCGGAAACTAGCTCCGACTGTTT	1034
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ACCESSION	A68824		
VERSION	A68824.1	GI:4759752	
KEYWORDS			
SOURCE	unidentified		
ORGANISM	unclassified.		
REFERENCE	1. (bases 1 to 2229)		
AUTHORS	Kieffer, B.L., Matthes, H.W., Simonin, F.H., Dierich, A. and Lemeur, M.		
TITLE	TRANSGENIC ANIMAL WHOSE EXPRESSION OF THE OPIATE RECEPTORS IS		
JOURNAL	MODIFIED		
COMMENT	Patent: WO 9802534-A 1 22-JAN-1998;		
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ORIGIN

Query Match 37.3%; Score 430.8; DB 6; Length 2229;
Best Local Similarity 65.7%; Pred. No. 2.7e-69;
Matches 662; Conservative 0; Mismatches 337; Indels 9; Gaps 2;

QY 92 CCGGCTGGGCGGAGCCGACAGCAACGGGAGCGCCGCTCGAGGAGCGGAGCTGGAGC 151
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QY 152 CCGGCGACATCTCCCGGCGATCCCGGTGATCATCGGGGGTCTACTCCGTAGTGTGG 211
DB 434 CCGGAGCGCCTTCCATGGTACAGCCATCACCATCATGCGCCCTTATTTATCGTGTGTG 493

QY 212 TCGTGGCTTGGTGGGCAACTCGCTGTGATGTCGATCATCGGATACCGATACACAAAGATGA 271
DB 494 TAGTGGCTCTTTGGAACTTCTGTCATGTATGTGATGTAGATATACAAAGATGA 553

QY 272 AGACAGAACCAACATTAATTAACCTGGCTTGGCAGATCTTCACTTGTACAA 331
DB 554 AGACTGCCAACCAACTACATTTCAACCTTGTCTGGCAGATGCTTAGCCACTAGCA 613

QY 332 CCATGCGCTTTCAGAGTACGGTCTACTGATGATTTCTGGGCTTTTGGGGATGTGCTGT 391
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QY 392 GCAAGATAGTAATTTCCATTTGATTTACTACCAATGTTCCAGCATCTTCACTTGTACCA 451
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DB 1085 GGATCACCAGATGGTCTGCTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGTGGT 1144

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LOCUS AR409587 Sequence 1 from patent US 6632977.
DEFINITION Sequence 1 from patent US 6632977.
ACCESSION AR409587
VERSION AR409587.1 GI:40160560
KEYWORDS
SOURCE Unknown.
ORGANISM Unknown.
REFERENCE 1 (bases 1 to 2229)
AUTHORS Kieffer, B., Matthes, H. W. D., Simonin, P. H., Dierich, A. and Lemer, M.
TITLE Transgenic animal whose expression of the opiate receptors is modified
JOURNAL Patent: US 6632977-A 1 14-OCT-2003;
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Query Match 37.3%; Score 430.8; DB 6; Length 2229;
Best Local Similarity 65.7%; Pred. No. 2.7e-69;
Matches 662; Conservative 0; Mismatches 337; Indels 9; Gaps 2;

QY 92 CCGGCTGGGCGGAGCCGACAGCAACGGGAGCGCCGCTCGAGGAGCGGAGCTGGAGC 151
DB 374 CCGACCCATCGGTCTTAACCGCACGGGGCTTGGCGGAGCCACAGCCTGTGCCCTCAGA 433

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 VERSION U19380.1 GI:885964
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 SOURCE Mus musculus
 ORGANISM Mus musculus
 Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;
 Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus.
 REFERENCE 1 (bases 1 to 2229)
 AUTHORS Kaufman,D.L., Keith,D.E., Anton,B., Tian,J., Magendzo,K.,
 Newman,D., Tran,T., Lee,D.S., Wen,C., Xia,Y., Lusis,A.J. and
 Evans,C.J.
 CHARACTERIZATION of the murine mu opioid receptor gene
 J. Biol. Chem. 270 (26), 15877-15883 (1995)
 MEDLINE 95318184
 PUBMED 7797593
 REFERENCE 2 (bases 1 to 2229)
 AUTHORS Evans,C.C.
 DIRECT SUBMISSION
 TITLE Submitted (04-JAN-1995) Christopher J Evans, Psychiatry and
 Biobehavioral Sciences, University of California at Los Angeles,
 UCLA-NPI, 760 Westwood Plaza, Los Angeles, CA 90024-1759, USA
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ORIGIN
 Query Match 37.3%; Score 430.8; DB 10; Length 2229;
 Best Local Similarity 65.7%; Pred. No. 2.7e-69;
 Matches 682; Conservative 0; Mismatches 337; Indels 9; Gaps 2;

Qy 92 CCGGCTGGGCGGAGCCGAGCAGGAGCGCGGCTCGGAGGAGCGGAGCTGGAGC 151
 Db 374 CCGACCATCGCGTCTTAACCGCAGCGGCTTGGGGAGGAGCAGCCTGTCCCTCAGA 433
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 Db 434 CCGGAGCCCTTCCATGGTCAAGCCATCACCATCATGGCCCTCTATTCTATCGTGTG 493
 Qy 212 TCGTGGCTTGGTGGCAACTCGCTGGTCAATGTTCTGTATCATCCGATACACAAAGATCA 271
 Db 494 TAGTGGGCTCTTTGGAAACTTCTGCTCATGTATGTGATTTGAAGATATACCAAATGA 553
 Qy 272 AGACAGCAACCAACATTTACATATTTAACTGCTTTGGCAGATGCTTTAGTTACTACAA 331
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 Qy 392 GCAAGATAGTAAATTTCCATTGATTACTACAAGATGTTACACAGCATCTTCACCTTGACCA 451
 Db 674 GCAAGATCGTGATCTCAATAGACTACTACAAGATGTTACACAGTATCTTACCCCTTGCA 733
 Qy 452 TGATGAGCGTGGACCGCTACATTCGCTGTGCACCCCGTGAAGGCTTTGGACTTCCGCA 511
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 Qy 572 TCTCTCAATAGTCTTGGAGGAGCACCAGTACAGGAGAGCGTCGATGTCTATGATGTCT 631
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 Db 1025 TACGACTCAAGAGTGTCCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1084
 Qy 812 GGATCAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 871
 Db 1085 GGATCAGAGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1144
 Qy 872 ACATATTCTATCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 931
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ACCESSION		S77872	
VERSION		S77872.1	GI:998531
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ORGANISM		Mus sp.	
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AUTHORS		Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi; Mammalia; Eutheria; Rodentia; Sciurognathi; Muridae; Murinae; Mus. 1 (Bases 1 to 1186)	
TITLE		Liu,H.C., Lu,S., Augustin,L.B., Felsheim,R.F., Chen,H.C., Loh,H.H. and Wei,L.N.	
JOURNAL		Cloning and promoter mapping of mouse kappa opioid receptor gene	
MEDLINE		Biochem. Biophys. Res. Commun. 209 (2), 639-647 (1995)	
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REMARK		7733933	
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- 7: em_estro:*
- 8: em_htc:*
- 9: gb_est1:*
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- 12: gb_est3:*
- 13: gb_est4:*
- 14: gb_est5:*
- 15: em_estfun:*
- 16: em_estom:*
- 17: em_gss_hum:*
- 18: em_gss_inv:*
- 19: em_gss_pin:*
- 20: em_gss_vrt:*
- 21: em_gss_fun:*
- 22: em_gss_mam:*
- 23: em_gss_mus:*
- 24: em_gss_pro:*
- 25: em_gss_rpd:*
- 26: em_gss_pbg:*
- 27: em_gss_vrl:*
- 28: gb_gss1:*
- 29: gb_gss2:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	805.2	69.8	895	14	CB565888
2	470.6	40.8	837	14	CF593603
3	468	40.6	480	13	EX092912
4	430.8	37.3	2405	11	AK038389

5	420	36.4	4022	11	AK043873
6	367.8	31.9	2919	11	AK038620
7	367.8	31.9	2959	11	AK079529
8	352	30.5	879	29	AY410745
9	335.6	29.1	2340	11	AK044178
10	327.4	28.4	2974	11	AK043275
11	327	28.3	3101	11	AK031926
12	325.8	28.2	879	29	AY410747
13	311.4	27.0	1053	29	CNS04C2T
14	277.6	24.1	783	13	EX874804
15	271.4	23.5	888	10	BF676176
16	268.6	23.3	917	13	BU219878
17	239.8	20.8	657	10	BS588668
18	231.2	20.0	682	29	AY410746
19	229.6	19.9	1176	29	AY400827
20	227.4	19.7	389	10	BS649947
21	226.6	19.6	1176	29	AY400829
22	226.6	19.6	2014	11	AK046464
23	224.6	19.5	980	12	BM543468
24	223	19.3	632	10	BB641725
25	221.4	19.2	1006	29	AY400676
26	217.6	18.9	784	13	BQ179053
27	214.8	18.6	1006	29	AY400674
28	214	18.5	429	12	BM342951
29	213.8	18.5	2432	11	AK051189
30	213	18.5	836	29	CNS02261
31	213	18.5	866	14	CD246184
32	211	18.3	531	29	CES17843
33	208.6	18.1	877	29	CNS028C2
34	208.2	18.0	842	29	CNS028KU
35	207.8	18.0	697	13	BU139251
36	207.8	18.0	757	13	BU614716
37	203.4	17.6	785	12	BM754749
38	202.8	17.6	810	12	BM943972
39	199.2	17.3	649	13	BU219037
40	195.6	16.9	816	13	BQ179148
41	194	16.8	787	29	BM228633
42	192.8	16.7	746	13	BQ571737
43	190.6	16.5	954	29	AY410421
44	189.8	16.4	546	28	AZ226406
45	182.2	15.8	2848	11	AK039151
46	181.8	15.8	318	29	CG536117
47	181.2	15.7	776	14	CF550026
48	180.4	15.6	1176	29	AY400828
49	179.2	15.5	735	13	BU366266
50	178.8	15.5	987	29	AY401571
51	178.8	15.5	2724	11	EC033145
52	178.4	15.5	433	10	AW489031
53	178.4	15.5	741	13	BU613017
54	177.8	15.4	720	12	BI753905
55	176	15.3	828	13	EX843850
56	171.6	14.9	1307	11	CNS1711BD
57	170.2	14.7	654	10	AW373832
58	170.2	14.7	990	29	AY401573
59	169	14.6	1095	29	AY400986
60	168.4	14.6	627	12	BI919235
61	168.2	14.6	183	14	R81583
62	166.4	14.4	710	29	CNS01ZMG
63	165	14.3	945	29	AY410423
64	164	14.2	502	13	EX280512
65	162.2	14.1	1257	29	AY400332
66	162	14.0	798	14	CD559493
67	161.4	14.0	1089	29	AY400988
68	160	13.9	714	10	BB631900
69	159.4	13.8	550	10	BF193020
70	159.4	13.8	987	29	AY401572
71	159.2	13.8	768	13	BU318522
72	158.8	13.8	795	14	CD559491
73	158.4	13.7	910	29	AY410422
74	156.2	13.5	1287	29	AY400334
75	156	13.5	701	14	CF147827
76	155.4	13.5	688	13	BU057593
77	153.4	13.3	916	13	EX433241

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OM nucleic - nucleic search, using sw model

Run on: August 31, 2004, 02:26:37 ; Search time 602 Seconds
(without alignments)
9434.096 Million cell updates/sec

Title: US-09-904-584-1

Perfect score: 1154

Sequence: 1 atggactcccgatccagat.....ccagtagtactagctgtgga 1154

Scoring table: IDENTITY NUC

Gapop 10.0, Gapext 1.0

Searched: 3327270 seqs, 2460713050 residues

Total number of hits satisfying chosen parameters: 6474540

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 500 summaries

Database : Published Applications NA:

- 1: /cgm2_6/ptodata/1/pubpna/US07_PUBCOMB.seq*
- 2: /cgm2_6/ptodata/1/pubpna/PCT_NEW_PUB.seq*
- 3: /cgm2_6/ptodata/1/pubpna/US06_NEW_PUB.seq*
- 4: /cgm2_6/ptodata/1/pubpna/US06_PUBCOMB.seq*
- 5: /cgm2_6/ptodata/1/pubpna/US07_NEW_PUB.seq*
- 6: /cgm2_6/ptodata/1/pubpna/PCTUS_PUBCOMB.seq*
- 7: /cgm2_6/ptodata/1/pubpna/US08_NEW_PUB.seq*
- 8: /cgm2_6/ptodata/1/pubpna/US08_PUBCOMB.seq*
- 9: /cgm2_6/ptodata/1/pubpna/US09A_PUBCOMB.seq*
- 10: /cgm2_6/ptodata/1/pubpna/US09B_PUBCOMB.seq*
- 11: /cgm2_6/ptodata/1/pubpna/US09C_PUBCOMB.seq*
- 12: /cgm2_6/ptodata/1/pubpna/US09_NEW_PUB.seq*
- 13: /cgm2_6/ptodata/1/pubpna/US09_NEW_PUB.seq*
- 14: /cgm2_6/ptodata/1/pubpna/US10A_PUBCOMB.seq*
- 15: /cgm2_6/ptodata/1/pubpna/US10B_PUBCOMB.seq*
- 16: /cgm2_6/ptodata/1/pubpna/US10C_PUBCOMB.seq*
- 17: /cgm2_6/ptodata/1/pubpna/US10_NEW_PUB.seq*
- 18: /cgm2_6/ptodata/1/pubpna/US60_NEW_PUB.seq*
- 19: /cgm2_6/ptodata/1/pubpna/US60_PUBCOMB.seq*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

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2	1152.4	99.9	1154	12	US-09-904-584-2
3	1152.4	99.9	1154	12	US-09-904-584-3
4	1152.4	99.9	1154	12	US-09-904-584-4
5	1152.4	99.9	1154	12	US-09-904-584-5
6	1152.4	99.9	1154	12	US-09-904-584-6
7	1152.4	99.9	1154	12	US-09-904-584-7
8	1146	99.3	1182	15	US-10-225-567A-147
9	1146	99.3	1182	15	US-10-345-680-19
10	1146	99.3	1182	16	US-10-305-720-1417
11	1143	99.0	1143	17	US-10-283-975A-80
12	1143	99.0	1143	15	US-10-318-661-1
13	1137.8	98.6	1284	15	US-10-318-661-3
14	1135	98.4	1143	15	US-10-345-680-21
Sequence 1, Appli					
Sequence 2, Appli					
Sequence 3, Appli					
Sequence 4, Appli					
Sequence 5, Appli					
Sequence 6, Appli					
Sequence 7, Appli					
Sequence 147, App					
Sequence 19, Appl					
Sequence 1417, Ap					
Sequence 80, Appl					
Sequence 1, Appli					
Sequence 3, Appli					
Sequence 21, Appl					

15	1131.8	98.1	1143	11	US-09-826-509-542	Sequence 542, App
16	1001	86.7	1275	15	US-10-318-661-5	Sequence 5, Appli
17	996.2	86.3	1275	15	US-10-318-661-7	Sequence 7, Appli
18	981	85.0	1875	15	US-10-318-661-13	Sequence 13, Appl
19	965	83.6	1875	15	US-10-318-661-15	Sequence 15, Appl
20	910.8	78.9	1408	9	US-09-214-904-5	Sequence 5, Appli
21	879.4	76.2	1911	15	US-10-318-661-17	Sequence 17, Appl
22	879.4	76.2	1911	15	US-10-318-661-17	Sequence 18121
23	470.6	40.8	585	13	US-10-027-632-188121	Sequence 18121
24	470.6	40.8	585	13	US-10-027-632-188122	Sequence 18122
25	470.6	40.8	585	16	US-10-027-632-188121	Sequence 18121
26	446.4	38.7	1618	10	US-09-841-720-1	Sequence 1, Appli
27	446.4	38.7	1618	10	US-09-841-720-3	Sequence 3, Appli
28	436.2	37.8	1464	15	US-10-185-083-25	Sequence 25, Appl
29	436.2	37.8	1464	15	US-10-194-595-25	Sequence 25, Appl
30	434.8	37.7	1239	15	US-10-080-917-10	Sequence 10, Appl
31	434.8	37.7	1239	15	US-10-080-917-10	Sequence 8, Appli
32	434.8	37.7	1239	15	US-10-080-917-10	Sequence 26, Appl
33	434.8	37.7	1388	15	US-10-194-595-26	Sequence 26, Appl
34	434.8	37.7	1388	15	US-10-194-595-26	Sequence 6, Appli
35	434.8	37.7	1431	15	US-10-080-917-6	Sequence 12, Appl
36	434.8	37.7	2149	15	US-10-080-917-12	Sequence 12, Appl
37	434.8	37.7	2149	15	US-10-080-917-12	Sequence 185, App
38	434.8	37.7	2162	15	US-10-225-567A-185	Sequence 1379, Ap
39	433.2	37.5	1176	10	US-09-935-061-11	Sequence 11, Appl
40	433.2	37.5	1176	10	US-09-935-061-11	Sequence 11, Appl
41	432.6	37.5	1473	15	US-10-080-917-13	Sequence 13, Appl
42	432.6	37.5	2951	15	US-10-185-083-21	Sequence 21, Appl
43	432.6	37.5	2951	15	US-10-185-083-21	Sequence 21, Appl
44	432.4	37.5	1332	15	US-10-185-083-22	Sequence 22, Appl
45	432.4	37.5	1332	15	US-10-185-083-22	Sequence 22, Appl
46	432.4	37.5	1334	9	US-09-761-962-3	Sequence 3, Appli
47	432.4	37.5	1334	15	US-10-283-300-3	Sequence 3, Appli
48	432.4	37.5	1365	9	US-09-761-962-11	Sequence 11, Appl
49	432.4	37.5	1365	15	US-10-283-300-11	Sequence 11, Appl
50	432.4	37.5	1373	15	US-10-185-083-51	Sequence 51, Appl
51	432.4	37.5	1373	15	US-10-185-083-51	Sequence 51, Appl
52	432.4	37.5	1423	9	US-09-761-962-1	Sequence 1, Appli
53	432.4	37.5	1423	15	US-10-283-300-1	Sequence 1, Appli
54	432.4	37.5	1440	15	US-10-185-083-15	Sequence 15, Appl
55	432.4	37.5	1569	15	US-10-185-083-15	Sequence 15, Appl
56	432.4	37.5	1569	15	US-10-185-083-17	Sequence 17, Appl
57	432.4	37.5	1589	15	US-10-194-595-17	Sequence 17, Appl
58	432.4	37.5	1610	9	US-09-761-962-16	Sequence 16, Appl
59	432.4	37.5	1614	15	US-10-283-300-16	Sequence 16, Appl
60	432.4	37.5	1614	15	US-10-185-083-16	Sequence 16, Appl
61	432.4	37.5	1695	15	US-10-194-595-16	Sequence 16, Appl
62	432.4	37.5	1695	15	US-10-185-083-24	Sequence 24, Appl
63	432.4	37.5	1729	9	US-10-194-595-24	Sequence 24, Appl
64	432.4	37.5	1729	9	US-09-761-962-9	Sequence 9, Appli
65	432.4	37.5	1729	15	US-10-283-300-9	Sequence 9, Appli
66	432.4	37.5	2045	9	US-09-761-962-10	Sequence 10, Appl
67	432.4	37.5	2045	15	US-10-283-300-10	Sequence 10, Appl
68	432.4	37.5	2588	15	US-10-185-083-23	Sequence 23, Appl
69	432.4	37.5	2588	15	US-10-185-083-23	Sequence 23, Appl
70	431.6	37.4	1182	11	US-09-826-509-546	Sequence 546, App
71	431.6	37.4	1203	11	US-09-826-509-546	Sequence 544, App
72	430.8	37.3	2229	9	US-09-214-904-1	Sequence 1, Appli
73	430.8	37.3	2229	9	US-09-993-844-10	Sequence 10, Appl
74	429.2	37.2	1542	9	US-09-761-962-4	Sequence 4, Appli
75	429.2	37.2	1542	15	US-10-283-300-4	Sequence 4, Appli
76	429.2	37.2	1981	9	US-09-823-114-15	Sequence 15, Appl
77	422.6	36.6	1829	9	US-10-290-748-15	Sequence 15, Appl
78	422.6	36.6	1829	9	US-09-823-114-7	Sequence 7, Appli
79	422.6	36.6	2218	9	US-10-290-748-7	Sequence 3, Appli
80	422.6	36.6	2219	15	US-10-112-599A-1	Sequence 1, Appli
81	422.6	36.6	2219	17	US-10-435-655-1	Sequence 1, Appli
82	415.6	36.0	1176	10	US-09-935-061-13	Sequence 13, Appl
83	415.6	36.0	1176	17	US-10-692-071-13	Sequence 13, Appl
84	411	35.6	1346	9	US-09-761-962-12	Sequence 12, Appl
85	408.6	35.4	1773	15	US-10-283-300-12	Sequence 12, Appl
86	408.6	35.4	1773	15	US-10-112-599A-3	Sequence 3, Appli
87	408.6	35.4	1773	15	US-10-225-567A-107	Sequence 107, App

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OM nucleic - nucleic search, using sw model

Run on: August 30, 2004, 16:58:44 ; Search time 528 Seconds

(without alignments)
9284.887 Million cell updates/sec

Title: US-09-904-584-1

Perfect score: 1154

Sequence: 1 agggactcccgatccagat.....ccagtgatgactagtctgga 1154

Scoring table: IDENTITY_NUC

Gapop 10.0 , Gapext 1.0

Searched: 3373863 seqs, 2124099041 residues

Total number of hits satisfying chosen parameters: 6747726

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 500 summaries

Database :

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1: Geneseq1980s:*
2: Geneseq1990s:*
3: Geneseq2000s:*
4: Geneseq2001as:*
5: Geneseq2001bs:*
6: Geneseq2002s:*
7: Geneseq2003as:*
8: Geneseq2003bs:*
9: Geneseq2003cs:*
10: Geneseq2004s:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1146	99.3	1182	7	ACA56819 Human sig
2	1146	99.3	1182	7	ABZ42678 Human opi
3	1146	99.3	1182	9	AAD59490 Human kap
4	1146	99.3	1182	9	AD84861 Farnesyl
5	1143	99.0	1143	2	AAT90998 Human kap
6	1142	99.0	1142	2	AAT12550 Human kap
7	1137.8	98.6	1284	2	AAT90999 Human kap
8	1131.8	98.1	1143	5	AB198011 Human kap
9	1001	86.7	1275	2	AAV49254 Mouse kap
10	910.8	78.9	1408	2	AAV49254 Mouse kap
11	910.8	78.9	1410	2	AAQ8725 Mammalian
12	910.8	78.9	2481	2	AAQ8725 Mammalian
13	869.6	75.4	1000	2	AAQ75931 Human kap
14	448	38.8	2135	5	AAAF85416 Nucleotid
15	446.4	38.7	1618	2	AAQ89222 Rat mu op
16	446.4	38.7	1618	2	AAQ89223 Transcrip
17	446.4	38.7	1618	3	AAAS9499 cDNA enco
18	443.4	38.4	2070	2	AAQ79199 Rat mu-su
19	436.4	37.8	2162	2	AAV61394 Human mu-
20	434.8	37.7	1239	6	ABSS54814 cDNA enco
21	434.8	37.7	1245	6	ABSS54813 cDNA enco
22	434.8	37.7	1431	6	ABSS54812 cDNA enco
23	434.8	37.7	1610	2	AAQ89226 Human mu

24	434.8	37.7	1610	3	AAA59503	CDNA enco
25	434.8	37.7	2149	6	ABSS54815	CDNA enco
26	434.8	37.7	2160	2	AAQ93102	Human mu
27	434.8	37.7	2162	2	AAV61995	Human mu-
28	434.8	37.7	2162	2	AAV61986	Human mu-
29	434.8	37.7	2162	2	AAV61988	Human mu-
30	434.8	37.7	2162	2	AAV61984	Human mu-
31	434.8	37.7	2162	2	AAV61987	Human mu-
32	434.8	37.7	2162	2	AAV61990	Human mu-
33	434.8	37.7	2162	2	AAV61985	Human mu-
34	434.8	37.7	2162	2	AAV61989	Human mu-
35	434.8	37.7	2162	3	AAZ88470	Human mu
36	434.8	37.7	2162	6	ABK14953	Human mu
37	434.8	37.7	2162	7	ACA56781	Human opi
38	434.8	37.7	2162	7	ABZ42697	Human DPA
39	434.8	37.7	2162	9	ADC21534	Human DNA
40	434.8	37.7	2162	7	AD51226	Human REM
41	433.2	37.5	1176	7	AAZ50855	Human REM
42	433.2	37.5	1473	6	ABSS54816	CDNA enco
43	433.2	37.5	2162	2	AAV61991	Human mu-
44	433.2	37.5	2162	2	AAV61992	Human mu-
45	433.2	37.5	2162	2	AAV61993	Human mu-
46	432.4	37.5	1334	3	AAZ60728	CDNA enco
47	432.4	37.5	1346	3	AAZ60737	CDNA enco
48	432.4	37.5	1365	3	AAZ60736	CDNA enco
49	432.4	37.5	1423	3	AAZ60726	CDNA enco
50	432.4	37.5	1610	3	AAZ60741	CDNA enco
51	432.4	37.5	1729	3	AAZ60734	CDNA enco
52	431.6	37.4	1182	5	AB198013	Non-endog
53	431.6	37.4	1203	5	AB198012	Non-endog
54	430.8	37.3	2045	3	AAZ60735	CDNA enco
55	430.8	37.3	2229	3	AAV49252	Mouse mu
56	430.4	37.3	1149	6	ABX13057	Human MOR
57	429.2	37.2	1542	3	AAZ60729	CDNA enco
58	429.2	37.2	1981	5	AAZ11041	Murine de
59	429.2	37.2	1981	6	ABSS5445	DNA seque
60	427.6	37.1	1981	2	AAQ56705	Partial s
61	422.6	36.6	1821	2	AAQ56700	Sequence
62	422.6	36.6	1829	5	AAZ11035	Murine de
63	422.6	36.6	1829	5	ABSS5439	CDNA enco
64	422.6	36.6	2218	2	AAV49253	Mouse del
65	422.6	36.6	2219	7	ABV75085	Murine de
66	422.6	36.6	2272	2	AAQ75927	Mouse del
67	415.6	36.0	1176	7	AAZ50856	Human mod
68	415.6	36.0	2216	2	AAQ66656	Murine de
69	408.6	35.4	1773	7	ACA56807	Human sig
70	408.6	35.4	1773	7	ABT34217	Human del
71	408.6	35.4	1773	7	ABV75086	Human del
72	408.6	35.4	1773	7	ABZ42658	Human opi
73	407	35.3	1119	5	AB198009	Non-endog
74	402.2	34.9	1197	7	AAZ50857	Human mod
75	395	34.2	1829	7	ABX94262	Human orp
76	393.4	34.1	1805	6	ABSS53446	CDNA enco
77	393.4	34.1	1829	7	ABX94264	Human orp
78	393.4	34.1	1829	7	ABX94263	Human orp
79	393.4	34.1	1973	7	ACA56793	Human sig
80	393.4	34.1	1273	9	ADC40517	DNA deriv
81	393.4	34.1	2534	7	ABX94045	CDNA enco
82	393.4	34.1	2534	7	ABZ42709	Human opi
83	391.8	34.0	1113	5	AB198010	Non-endog
84	391.8	34.0	1829	7	ABX94260	Human orp
85	387.6	33.6	1238	3	AAZ60727	CDNA enco
86	387.6	33.6	1257	3	AAZ60730	CDNA enco
87	384	33.3	1870	6	ABSS54825	DNA enco
88	377.6	32.7	1243	7	ABX94042	Rat orpha
89	377.6	32.7	1387	7	ABX94039	Rat orpha
90	377.6	32.7	1567	3	AAQ89233	Rat opio1
91	377.6	32.7	1567	3	AAA59510	CDNA enco
92	376	32.6	2706	6	ABSS54811	Rat opior
93	375.6	32.5	945	6	ABSS54811	cDNA enco
94	368	31.9	1452	2	AAZ90381	Rat metha
95	368	31.9	1452	2	AAZ89585	Rat orpha
96	368	31.9	1452	2	AAV56017	Rat metha

GenCore version 5.1.6
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OM nucleic - nucleic search, using sw model

Run on: August 30, 2004, 16:58:44 ; Search time 103 Seconds

(without alignments)
6217.605 Million cell updates/sec

Title: US-09-904-584-1

Perfect score: 1154

Sequence: 1 atggactcccgatccagat.....ccagatgactagtcgtgga 1154

Scoring table: IDENTITY_NUC

Gapop 10_0, Gapext 1.0

Searched: 682709 seqs, 277475446 residues

Total number of hits satisfying chosen parameters: 1365418

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 500 summaries

Database : Issued Patents NA.*

1: /cgn2_6/ptodata/2/ina/5A_COMB.seq:*
2: /cgn2_6/ptodata/2/ina/5B_COMB.seq:*
3: /cgn2_6/ptodata/2/ina/6A_COMB.seq:*
4: /cgn2_6/ptodata/2/ina/6B_COMB.seq:*
5: /cgn2_6/ptodata/2/ina/PCTUS_COMB.seq:*
6: /cgn2_6/ptodata/2/ina/backfiles1.seq:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

Result NO.	Score	Query Match	Length	DB ID	Description
1	1146	99.3	1182	4	US-09-016-434-1417
2	1143	99.0	1143	4	US-09-341-446B-1
3	1142	99.0	1142	3	US-08-765-743-1
4	1137.8	98.6	1284	4	US-09-341-446B-3
5	1001	86.7	1275	4	US-09-341-446B-5
6	996.2	86.3	1275	4	US-09-341-446B-7
7	910.8	78.9	1408	4	US-09-214-904-5
8	910.8	78.9	1410	3	US-08-147-592A-1
9	910.8	78.9	1410	4	US-08-292-694A-1
10	871.2	75.5	1000	3	US-08-147-592A-11
11	871.2	75.5	1000	4	US-08-292-694A-11
12	448	38.8	2135	3	US-08-430-286A-1
13	446.4	38.7	1618	3	US-08-889-108-1
14	446.4	38.7	1618	3	US-08-889-108-3
15	446.4	38.7	1618	3	US-08-120-601B-1
16	446.4	38.7	1618	3	US-08-120-601B-3
17	446.4	38.7	1618	5	PCT-US94-10358-1
18	446.4	38.7	1618	5	PCT-US94-10358-3
19	434.8	37.7	1610	3	US-08-889-108-7
20	434.8	37.7	1610	5	PCT-US94-10358-1
21	434.8	37.7	2160	3	US-08-188-275A-1
22	434.8	37.7	2162	4	US-09-351-198-1
23	434.8	37.7	2162	4	US-09-113-426-1
24	434.8	37.7	2162	4	US-09-016-434-1379
25	434.8	37.7	2162	4	US-09-355-709C-7
26	432.4	37.5	1334	4	US-09-761-962A-3
27	432.4	37.5	1365	4	US-09-761-962A-11

28	432.4	37.5	1423	4	US-09-761-962A-1	Sequence 1, Appli
29	432.4	37.5	1610	4	US-09-761-962A-16	Sequence 16, Appli
30	432.4	37.5	1729	4	US-09-761-962A-9	Sequence 9, Appli
31	432.4	37.5	2045	4	US-09-761-962A-10	Sequence 10, Appli
32	430.8	37.3	2229	4	US-09-214-904-1	Sequence 1, Appli
33	429.2	37.2	1542	4	US-09-761-962A-4	Sequence 4, Appli
34	429.2	37.2	1981	3	US-08-387-707-15	Sequence 15, Appli
35	429.2	37.2	1981	4	US-08-405-271A-15	Sequence 15, Appli
36	422.6	36.6	1829	2	US-08-411-859-1	Sequence 1, Appli
37	422.6	36.6	1829	3	US-08-387-707-7	Sequence 7, Appli
38	422.6	36.6	1829	4	US-08-405-271A-7	Sequence 7, Appli
39	422.6	36.6	2218	4	US-09-214-904-3	Sequence 3, Appli
40	422.6	36.6	2219	4	US-08-432-174A-1	Sequence 1, Appli
41	422.6	36.6	2272	3	US-08-147-592A-3	Sequence 3, Appli
42	422.6	36.6	2272	4	US-08-292-694A-3	Sequence 3, Appli
43	411	35.6	1346	4	US-09-761-962A-12	Sequence 12, Appli
44	408.5	35.4	1773	4	US-09-016-434-1405	Sequence 1405, Ap
45	399	34.6	1998	4	US-08-432-174A-3	Sequence 3, Appli
46	393.4	34.1	1805	4	US-08-405-271A-18	Sequence 18, Appli
47	393.4	34.1	1973	4	US-09-016-434-1391	Sequence 1391, Ap
48	393.4	34.1	1973	4	US-09-023-655-1417	Sequence 1417, Ap
49	393.4	34.1	3205	4	US-09-976-594-171	Sequence 171, App
50	387.6	33.6	1238	4	US-09-761-962A-2	Sequence 2, Appli
51	387.6	33.6	1257	4	US-09-761-962A-5	Sequence 5, Appli
52	377.6	32.7	1567	3	US-08-889-108-16	Sequence 16, Appli
53	377.6	32.7	1567	5	PCT-US94-10358-16	Sequence 16, Appli
54	377.6	32.7	2706	2	US-08-454-549-1	Sequence 1, Appli
55	377.6	32.7	2706	3	US-08-454-552-1	Sequence 1, Appli
56	372.8	32.3	2706	3	US-08-676-351-1	Sequence 1, Appli
57	368	31.9	1452	1	US-08-149-093A-3	Sequence 3, Appli
58	368	31.9	1452	1	US-08-911-245-3	Sequence 3, Appli
59	368	31.9	1452	1	US-08-553-058C-3	Sequence 3, Appli
60	368	31.9	1452	2	US-08-514-451A-3	Sequence 3, Appli
61	368	31.9	1452	3	US-09-170-331-3	Sequence 3, Appli
62	368	31.9	1452	3	US-09-510-473-3	Sequence 3, Appli
63	368	31.9	1452	4	US-09-048-916B-3	Sequence 3, Appli
64	367.8	31.9	1134	4	US-09-743-871B-14	Sequence 14, Appli
65	367.8	31.9	1330	3	US-08-147-592A-5	Sequence 5, Appli
66	367.8	31.9	1330	4	US-08-292-694A-5	Sequence 5, Appli
67	367.8	31.9	2600	4	US-08-386-209A-1	Sequence 1, Appli
68	357	30.9	1177	4	US-09-743-871B-13	Sequence 13, Appli
69	344.8	29.9	2600	1	US-08-147-949A-1	Sequence 1, Appli
70	336.2	29.1	1223	4	US-09-743-871B-11	Sequence 11, Appli
71	336.2	29.1	1283	4	US-09-743-871B-12	Sequence 12, Appli
72	327.4	28.4	2634	4	US-09-743-871B-9	Sequence 9, Appli
73	327	28.3	1256	4	US-08-387-707-13	Sequence 13, Appli
74	319.6	27.7	830	4	US-08-405-271A-13	Sequence 13, Appli
75	319.6	27.7	830	4	US-08-387-707-12	Sequence 12, Appli
76	243	21.1	2447	3	US-08-387-707-12	Sequence 12, Appli
77	243	21.1	2447	4	US-08-387-707-12	Sequence 12, Appli
78	242.6	21.0	1317	1	US-09-016-434-1446	Sequence 1446, Ap
79	229.6	19.9	1205	1	US-08-417-103-13	Sequence 13, Appli
80	229.6	19.9	1634	1	US-07-816-283-1	Sequence 1, Appli
81	229.6	19.9	1634	4	US-08-417-103-1	Sequence 1, Appli
82	229.6	19.9	1634	4	US-09-016-434-1302	Sequence 1302, Ap
83	226.6	19.6	1265	1	US-07-816-283-3	Sequence 3, Appli
84	226.6	19.6	1265	1	US-08-417-103-3	Sequence 3, Appli
85	221.2	19.2	1244	1	US-07-816-283-7	Sequence 7, Appli
86	221.2	19.2	1244	1	US-08-417-103-7	Sequence 7, Appli
87	219.4	19.0	2518	4	US-09-743-871B-10	Sequence 10, Appli
88	214.8	18.6	1147	1	US-08-417-103-15	Sequence 15, Appli
89	214.8	18.6	1351	1	US-07-816-283-5	Sequence 5, Appli
90	214.8	18.6	1351	4	US-08-417-103-5	Sequence 5, Appli
91	214.8	18.6	1351	4	US-09-016-434-1303	Sequence 1303, Ap
92	210.4	18.2	1002	4	US-09-170-496B-15	Sequence 15, Appli
93	210.4	18.2	1518	1	US-08-148-215A-3	Sequence 3, Appli
94	210.4	18.2	1518	4	US-09-016-434-1480	Sequence 1480, Ap
95	207.2	18.0	1002	4	US-09-170-496B-171	Sequence 171, App
96	204.8	17.7	441	4	US-09-530-880-5	Sequence 5, Appli
97	175.6	15.2	987	4	US-09-170-496B-11	Sequence 11, Appli
98	175.6	15.2	1054	1	US-08-148-215A-1	Sequence 1, Appli
99	175.6	15.2	1596	4	US-09-761-962A-9	Sequence 9, Appli
100	172.4	14.9	987	4	US-09-016-434-1479	Sequence 1479, Ap
					US-09-170-496B-169	Sequence 169, App

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